THE UNIVERSITY OF KANSAS
SCIENCE BULLETIN

VOL. XXXIII, PT. I] APRIL 20, 1949 [NO. 2

A Preliminary Account of the Herpetology of the State of San Luis Potosí, México

EDWARD H. TAYLOR

ABSTRACT: A herpetological collection belonging to the Louisiana State University, acquired through the efforts of Mr. and Mrs. Robert Newman and Charles R. Shaw in the State of San Luis Potosí, México, is reviewed in some detail. Two amphibians, ten lizards, and twenty-three snakes are added to the known fauna. One new snake genus, *Schmidtophis,* and the following new species are described: *Xenosaurus newmanorum,* a lizard of the family Xenosauridae; and three colubrid snakes, *Schmidtophis rubriventris, Rhadinaea marcellae* and *Tantilla shawi.*

Under the immediate direction of Mr. George Lowery, the University of Louisiana has for several years been pursuing a study of the avian fauna of the state of San Luis Potosí, México. Several field parties have been stationed there at various times, and while their primary interests have been directed toward the collecting of birds, nevertheless numerous specimens of other vertebrate groups have been taken.

The most recent field party (1946-1947), consisting of Mr. Robert J. Newman, his wife, Marcella Newman, and Mr. Charles R. Shaw, were requested to obtain a representative lot of the herpetological fauna. This task fell largely to Mrs. Newman, who succeeded in collecting or acquiring more than 300 specimens. Aside from these, there are thirty-five specimens taken by Mr. Robert J. Newman and forty-four by Mr. Charles R. Shaw.

The collection is of especial importance, since the San Luis Potosí area had been largely neglected by earlier collectors, and in the recent herpetological explorations of Dr. Hobart M. Smith and me in Mexico no intensive collecting was done in any part of this state. Our journeys, however, have taken us across the eastern part of the state several times; once across the western part, and on one trip I

journeyed from the eastern part through the central plains area to the capital. Thus, a number of specimen records were obtained.

Three Mexican biotic provinces (delineated by Dr. Hobart M. Smith on the basis of herpetological data) include portions of the state. The Austro-central, which takes in the drier, western two-thirds of the state; the Austro-oriental, which includes most of the highlands of the eastern part; and a small lowland eastern area belonging in the Veracruzian province.

The known herpetological fauna of the state is listed herewith:

SNAKES

Leptotyphlops humilis tenuiculus
Leptotyphlops myopicus myopicus
Constrictor constrictor imperator
Conopsis nasus
Diadophis regalis laetus
Drymarchon corais erebennus
Drymobius margaritiferus margaritiferus
Elaphe chlorosoma
Geophis latifrontalis
Heterodon nasicus kennerlyi
Hypsiglena ochrorhyncha ochrorhyncha
Hypsiglena ochrorhyncha janii
Lampropeltis mexicana
Leptodeira annulata septentrionalis
Leptodeira maculata
Thalerophis mexicanus mexicanus
Masticophis flagellum lineatulus
Masticophis flagellum testaceus
Masticophis mentovarius mentovarius
Masticophis taeniatus australis
Masticophis taeniatus ruthveni
Oxybelis potosiensis
Pituophis deppei deppei
Pseustes poecilonotus argus
Rhadinaea crassa
Rhadinaea gaigeae
Salvadora lineata
Spilotes pullatus mexicanus
Tantilla atriceps
Tantilla deviatrix
Tantilla rubra
Tantilla wilcoxi rubricata
Toluca lineata lineata
Tropidodipsas sartorii sartorii
Natrix rhombifera blanchardi
Storeria dekayi texana
Storeria dekayi temporalineata
Storeria hidalgoensis
Storeria storerioides
Thamnophis eques cyrtopsis
Thamnophis macrostemma megalops
Thamnophis melanogaster canescens
Thamnophis sauritus proximus
Thamnophis scalaris scaliger
Micrurus fitzingeri microgalbineus
Bothrops atrox asper
Crotalus atrox
Crotalus lepidus lepidus
Crotalus molossus nigrescens
Crotalus scutulatus scutulatus
Crotalus triseriatus triseriatus

LIZARDS

Crotaphytus collaris collaris?
Ctenosaurus acanthura
Sceloporus cautus
Sceloporus ferrariperezi melanogaster
Sceloporus goldmani
Sceloporus jarrovii minor
Sceloporus microlepidotus disparilis
Sceloporus parvus parvus
Sceloporus parvus scutulatus
Sceloporus spinosus spinosus

Sceloporus variabilis variabilis
Phrynosoma modestum
Phrynosoma cornutum
Phrynosoma orbiculare var.
Holbrookia texana
Ameiva undulata podarga
Cnemidophorus gularis gularis
Cnemidophorus perplexus
Barisia imbricatus ciliaris
Anelytropsis papillosus
Eumeces lynxe lynxe
Eumeces tetragrammus

TURTLES

Kinosternon integrum
Terrapene mexicana
Gopherus berlandieri

AMPHIBIANS

Diemictylus kallerti
Bolitoglossa rufescens
Bolitoglossa platydactyla
Chiropterotriton multidentata
Scaphiopus couchii
Scaphiopus multiplicatus
Bufo cognatus
Bufo horribilis
Bufo valliceps
Bufo punctatus
Tomodactylus macrotympanum
Syrrhophus guttilatus
Syrrhophus latodactylus
Syrrhophus cystignathoides
Syrrhophus campi
Leptodactylus melanonotus
Leptodactylus labialis
Eleutherodactylus latrans
Eleutherodactylus rhodopis
Acrodytes spilomma
Smilisca baudinii baudinii
Hyla eximia
Hyla picta
Hyla staufferi
Hyla arenicolor
Hyla miotympanum
Hypopachus cuneus cuneus
Rana pipiens

The present collection contains numerous species that here are traced to this area for the first time. The following represent new records for the State of San Luis Potosí.

Pseudoeurycea bellii
Eleutherodactylus hidalgoensis
Anolis sericeus
Anolis petersii
Corythophanes hernandesii
Laemanctus serratus
Crotaphytus collaris baileyi
Holbrookia maculata approximans
Sceloporus jarrovii immucronatus
Sceloporus serrifer plioporus
Sceloporus olivaceus
Gerrhonotus liocephalus loweryi
Adelphicos quadrivirgatus quadrivirgatus
Ficimia streckeri
Geophis multitorques
Ninia diademata plorator
Rhadinaea decorata
Dryadophis melanolomus veraecrucis
Drymarchon corais erebennus
Pituophis deppei jani
Lampropeltis triangulum arcifera
Lampropeltis triangulum polyzona
Elaphe flavirufa flavirufa
Elaphe laeta laeta
Pliocercus laticollaris
Thamnophis phenax phenax
Thamnophis marciana
Coniophanes imperialis imperialis
Coniophanes fissidens proterops
Trimorphodon tau
Bothrops nummifer

There is a possibility that the species formerly reported from the State as *Crotaphytus collaris collaris* is identical with the one here referred to *C. collaris baileyi.*

The forms described as new are:

Xenosaurus newmanorum
Schmidtophis
Schmidtophis rubriventris
Rhadinaea marcellae
Tantilla shawi

A few specimens in the collection will be treated at a later time.

The larger part of the specimens were collected in the area about the town of Xilitla which lies in the southeastern part of the State of San Luis Potosí a few miles from the border of the State of Hidalgo and equally close to the border of Querétaro. Some of the mountains in this region exceed an elevation of 7,000 feet. A few of the specimens come from this elevation on Cerro Coneja. The greater part of the specimens, however, are from elevations between 2,000 and 3,000 feet.

Mrs. Newman was successful in interesting the townspeople in the collection and many specimens were brought to her by farmers, school children and others. This procedure made it almost impossible to obtain accurate elevation data. The surprising character of the collection is the far greater proportion of snakes to the amphibians and lizards than is usual in such a collection.

CAUDATA

Only one species of salamander, *Bolitoglossa platydactyla* (Gray), is represented in the collection by a numbered specimen. From the stomachs of certain snakes in the collection four other species have been taken, but it has not been possible, in all cases, to ascertain the complete identity of these.

Three of these came from snakes of the genus *Thamnophis.* These are *Thamnophis scalaris scaliger, T. marciana,* and *T. phenops phenops.* The fourth specimen came from the stomach of an aberrant rattlesnake referred to *Crotalus triseriatus triseriatus.*

Four species of salamanders have previously been found within the state limits. These are *Diemyctylus kallerti* Wolterstorff, *Bolitoglossa rufescens* (Cope), *Bolitoglossa platydactyla* (Gray), and *Chiropterotriton multidentata* (Taylor).

Diemyctylus kallerti Wolterstorff

Diemyctylus kallerti Wolterstorff, Abh. Ber. Mus. Magdeburg, vol. 6, 1930, pp. 147-149, pl. 3, fig. 1; text figs. 12, 13. (Type locality, Tampico, Veracruz.)

This species, known from Tampico, Veracruz, and from Villa Juarez, San Luis Potosí, has remained very rare in collections. A

specimen, consisting of a head, more or less intact, together with the partly digested remains of the body and limbs, was recovered from the stomach of a snake, *Thamnophis marciana* (Baird and Girard), which was taken 6.5 miles east of Sabanito, San Luis Potosí.

The generic identification was made on the characters of the head, especially the teeth, choanae, and on the character of the vertebrae. The specific identification is largely on the basis of probability, since *D. kallerti* is the only species of the genus known from this area, and the few characters exhibited agree. I have no doubt that it is correctly identified with that species.

Pseudoeurycea bellii (Baird)

Oedipus platydactylus Baird, Journ. Acad. Nat. Sci. Philadelphia, ser. 2, vol. 1, 1849, p. 286 (*nec Salamandra platydactylus* Cuvier). (Type locality, México.)

Spelerpes bellii Gray, Catalogue of the Batrachia gradientia of the British Museum, 1850, p. 46.

Pseudoeurycea bellii Taylor, Univ. Kansas Sci. Bull., vol. 30, 1944, p. 209.

A partly digested specimen of this species was taken from the stomach of *Thamnophis scalaris scaliger* (Jan). The characteristic red color markings of head and body identify this species without question. The snake is no. 293 from the Xilitla region and is mentioned elsewhere in the paper under its name. This is a new record of *P. bellii* for the state and the most northerly record on the eastern part of the plateau.

Bolitoglossa platydactyla (Gray)

Salamandra platydactylus Gray, Supplement, in Griffith and Pidgeon's Cuvier's, The Animal Kingdom, vol. 9, 1931, p. 107. (Type locality, México.)

Bolitoglossa platydactyla Taylor, Univ. Kansas Sci. Bull., vol. 30, 1944, p. 219.

The single specimen in the collection (no. 525) comes from the Xilitla region. It displays all the usual characteristics of this species. The dorsal coloration is uniform brownish-faun, with an elongate, V-shaped, dark mark on the head and neck, followed by four or five irregularly-placed dark flecks.

I suspect that this specimen came from a much lower elevation than that of the town of Xilitla (2,200 ft.), since the species is not known to occur much above 2,000 feet elevation.

Chiropterotriton sp.

A salamander taken from the stomach of no. 285, a young *Thamnophus phenax phenax* Cope, has the anterior part of the body more or less intact, save that the tips of the toes have the terminal pads missing, leaving the terminal bones exposed.

The following characters are evident: maxillary teeth 30-30, sub-

equal in size; premaxillary teeth, 8; vomerine teeth, 7-7, the series beginning on the inner edge of the choanae; separated from each other posteriorly by a distance equal to the narrowest diameter of choanae, and from the palatine series by a distance equal to two-thirds of the distance between choanae. Mandibular teeth 34-34.

First finger completely involved in web; others with small web at base, leaving 2½ phalanges free. The costal grooves are 13. The median part of the venter is without pigment; some pigment is present on the chin.

Most of the other external characters are obscured by the process of digestion, which makes specific identification uncertain. The teeth are somewhat more numerous than in *Chiropterotriton multidentata* Taylor. However, it is with this species that the form must be compared. Not impossibly it represents an undescribed form.

SALIENTIA

Bufo horribilis Wiegmann

Bufo horribilis Wiegmann, Isis von Oken, vol. 26, 1833, pp. 654-655. (Type locality, Misantla and Veracruz, Veracruz, México.)

A young specimen (no. 527) was taken by Charles R. Shaw 3 miles north of Pujal, San Luis Potosí.

Bufo valliceps Wiegmann

Bufo valliceps Wiegmann, Isis von Oken, vol. 26, 1833, pp. 657-659. (Type locality, México.)

A series of 33 specimens was collected (nos. 439-471), chiefly in April, May and June of 1947, although two specimens were found as early as March 5 of the same year.

Most of the specimens conform to the typical characters and color patterns of the species. Three, however (nos. 441, 456, and 459), large gravid females, are of a very dark blackish color, lacking almost all trace of the typical color pattern of the other specimens.

Melanism has not been observed in other populations of this widespread species.

Syrrhophus sp.

Two specimens of this genus are in the collection but unfortunately both are in poor condition. One, no. 533, "found drowned in a thunder-jug" is bloated and surface tissues are somewhat softened and rotted. Consequently, some of the features, such as color markings and skin characters, can be only doubtfully interpreted. The second (no. 534), completely dried and shrivelled before being placed in alcohol, likewise is difficult to identify.

The species belongs in the section of the genus in which a tiny outer palmar tubercle is present, and the terminal pads on outer fingers are distinctly wider than the digits. The choanae are small, the diameter of one contained in the distance between them, five to six times. One cannot be certain whether a web vestige is present or not or whether the skin of the venter is areolate. The diameter of the tympanum is about two thirds the diameter of the eye and the eyelid is granular. The identity of the species is in question. For one reason or another the following species of *Syrrhophus* in this section can be eliminated: *latodactylus, verruculatus, campi, guttilatus, smithi,* and *leprus.* If the specimens belong to a known species, they are referrable to *cystingnathoides* or *verrucipes* with the greater probability to *verrucipes.*

Three species are already known from the state. These are *Syrrhophus guttilatus, S. latodactylus* and *S. campi. S. cystignathoides* has been reported with a question.

Eleutherodactylus hidalgoensis Taylor

Eleutherodactylus hidalgoensis Taylor, Univ. Kansas Sci. Bull., vol. 28, pt. 2, 1942, pp. 299-301, pl. 25, figs. 5-8; pl. 27, fig. 10.

This rare species has been known previously from two small male specimens from near Tianguistengo, Hidalgo. Fortunately the collection contains three specimens, two large females and one male, all taken in a cave near Xilitla by Charles Shaw.

These specimens differ from the types in only small details. In the two larger females, the head while proportionally the same, shows no indefinite occipital fold, and the tympani of the females are somewhat larger—more than half of the diameter of the eye. The tympanum in the male is practically as in the type. On the tarsus the inner fold is distinct and continuous in the large females, indistinct in the male, and the tubercles on the outer side are faintly indicated in the females and are not discernible in the male.

The color (in formalin transferred to alcohol) of no. 523 is gray with some darker gray flecks. The tympanum is brown with a lighter center. The snout and head are darker gray, with a faint light interorbital line and two indistinct lighter diagonal lines or bars behind eyes tending to inclose a darker triangle. The barring on limbs is indistinct, the color dark gray. No. 524 is lavender to purplish brown. The head pattern is discernible but indistinct, and the back is clouded with darker. The bars on the limbs are more distinct than in the type. In the male (no. 525) the w-shaped pattern of the type is more plainly visible and the head markings are

likewise very distinct. The back is clouded or flecked with brown. All of these three specimens are light flesh on the ventral surfaces but there is a peppering of pigment visible under the lens.

The finding of these specimens in a cave is of great interest. It is possible that crevices in rocks and caves, rather than trees, are the normal habitat of the species and may account for the fact that only a few specimens have been found.

Smilisca baudinii baudinii Duméril and Bibron

Hyla baudinii Duméril and Bibron, Erpétologie générale ou histoire naturelle complète des reptiles, vol. 8, 1841, pp. 564-5. (Type locality, México.)

Hyla baudinii baudinii Stejneger and Barbour, Checklist of North American Reptiles and Amphibia, 2d ed., 1923, p. 29.

Smilisca daulinia Cope, Proc. Acad. Nat. Sci. Philadelphia, vol. 17, 1865, Oct., p. 65; footnote (=*Hyla baudinii*).

A series of 19 specimens (nos. 505-522, 532) was collected in May and June of 1947. The earliest date is May 9, and the latest June 25. Many of these are gravid females. All were taken in the Xilitla region or (one) "on the road to Xilitla."

Acrodytes spilomma Cope

Hyla spilomma Cope, Proc. American Phil. Soc., vol. 17, July 20, 1887, p. 86. (Type locality, Cosomoloapam, Veracruz, México.)

Acrodytes spilomma Smith and Taylor, Univ. Kansas Sci. Bull., vol. 30, 1944, p. 64.

A single small specimen (no. 531) belonging to this species was obtained at Pujal, November 21, 1946, by Charles R. Shaw. The dorsal coloration is brown with rather broad cream lines beginning behind the eye and extending back dorsolaterally about two-thirds the length of the body. The limbs are lighter than the body, with black flecks on the numerous pustules. It was found on a cornstalk.

Specimens have previously been reported from Río Coy (near Pujal) and Tamazunchale, in San Luis Potosí.

Hyla miotympanum Cope

Hyla miotympanum Cope, Proc. Acad. Nat. Sci. Philadelphia, vol. 18, Mar., 1863, p. 47. (Type locality, near Jalapa and Mirador, Veracruz, México.)

A gravid female (no. 529), taken at Xilitla, is in the collection. It differs from more typical specimens in having the tympanum nearly half the diameter of the eye, while the typical form usually has the tympanum only one third to one fourth the eye diameter.

There is a slight axillary web, and the first finger is opposed to the other three. A continuous inner tarsal fold is present.

Specimens have previously been reported from Tamuzunchale and Valles.

Hyla arenicolor Cope

Hyla affinis Baird, Proc. Acad. Nat. Sci. Philadelphia, vol. 7, Apr., 1854, p. 61 (*nec Hyla affinis* Spix, 1854). (Type locality, northern Sonora, México.)

Hyla arenicolor Cope, Journ. Acad. Nat. Sci. Philadelphia, ser. 2, vol. 6, July, 1866, p. 64 (substitute name for the preceding species).

A single specimen (no. 528) was obtained by Robert Newman at the San Luis Potosí Reservoir, March 28, 1947.

The specimen is ash gray with darker blotches. Specimens have been previously reported from the state.

Rana pipiens Schreber

Rana pipiens Schreber, Der Naturforscher, Halle, vol. 18, 1872, p. 185, pl. 4. (Type locality, Raccoon, Gloucester County, New Jersey, U. S. A.)

This widespread species is represented in Mexico by several forms which may well be worthy of subspecific recognition. However, no attempt has been made to allocate subspecifically a juvenile specimen in the collection (no. 530) taken at Villa del Reyes, San Luis Potosí.

SAURIA

Anolis sericeus Hallowell

Anolis sericeus, Hallowell Proc. Acad. Nat. Sci. Philadelphia, 1856, pp. 227-228. (El Encero de Jalapa, Veracruz.)

Seven specimens of this small anole are in the collection (nos. 561-567). Three of these have the two orbital series separated by an intercalated series of small scales. Four specimens have them separated save for one scale, which is in contact with its fellow. Four are males with an ample gular appendage bearing a dark red brown spot (said to be blue in life). The median portion of the appendage is whitish.

This is a new record for the state.

Anolis petersii Bocourt

Anolis petersii Bocourt, Mission Scientifique aux Mexique el dans l'Amérique Centrale; Etudes sur les Reptiles et les Batraciens, Livr. 2, 1873, pp. 79-80, pl. 13, fig. 2; pl. 15, figs. 11, 11a. (Type locality "la haute Vera Paz [Guatemala]"); Boulenger, Catalogue of the Lizards in the British Museum, 2d ed., vol. 2, 1885, pp. 66-67 (México).

Anolis biporcatus (non Wiegmann) Cope, Proc. Acad. Nat. Sci. Philadelphia, 1871, p. 215 (México).

A single specimen, no. 560, was captured in the Xilitla region. This form is rare in collections probably due to its habitat in forest trees. It is the largest Mexican species of the genus *Anolis*.

The specimen, a young adult, measures 93 mm. snout-to-vent. The type specimen is considerably larger, measuring 118 mm. This is the first record for the state.

Corythophanes hernandesii (Gray)

Chamaeleopsis Hernandezii Gray, Synops. Rept. in Griffith's Cuvier's Animal Kingdom, vol. 9, 1831, p. 45.

Corythophanes hernandesii Boulenger, Catalogue of the Lizards in the British Museum, 2d ed., vol. 2, 1885, p. 103.

A splendid series (nos. 407-438) of this rare casque-headed lizard with a horizontal spine above the ear, was obtained by Mrs. Newman in the Xilitla region. Two specimens, nos. 413 and 414, are from the specific locality, Rancho Apetsco.

The specimens agree in structural detail with Boulenger's decription (*loc. cit.*). However, there is variation in coloration between the two sexes. Females have the sides of the snout light while the eye is involved in a broad diagonal black line that reaches to the edge of the tympanum. Three lines begin from lower edge of the black stripe, and pass down across the jaws and then are deflected backwards to breast. The bellies are usually banded with lighter and darker brown, the latter may be broken into discrete spots. Sides of head casque dark. One dark band on shoulder and four more or less distinct short dorsal bands. The one on the rump is more conspicuous than the others.

Males often have the black diagonal stripe involving eye, bordered below with white. The sides of snout and entire lower jaw, throat, and to a lesser extent the abdomen, light. A small protruding throat fan evident in males (to a somewhat lesser extent in females). The sides of the casque are reddish brown with some black reticulation.

Laemanctus serratus Cope

Laemanctus longipes (non Wiegmann) Duméril, Arch. Mus., vol. 8, 1856, p. 512, pl. 21, fig. 4; Bocourt, Arch. Mus., vol. 8, p. 114, pl. 17, fig. 4.

Laemanctus serratus Cope, Proc. Acad. Nat. Sci. Philadelphia, 1864, p. 176. (Type locality, not stated, presumably México); Boulenger, Bull. Soc. Zool. France, 1877, p. 463, pl. 7, fig. 3; Catalogue of the Lizards of the British Museum, 2d ed., vol. 2, 1885, pp. 104-105.

Three splendid specimens of this bizarre species are in the collection (nos. 337-339) taken at Xilitla by Marcella Newman. This species has remained exceedingly rare in collections. In the extensive collections made by Dr. Hobart M. Smith and me over a period of years not a single specimen was taken. It is not known whether the species is actually rare or only seemingly so. Its tree habitat and green coloration in life would prevent easy observation and acquisition by collectors.

Between the semicircular orbital series and the superciliary edge there are about six rows of smaller unequal scales. The parietal

area is constricted somewhat behind the orbits, and the lateral serrate edges of the casque come together posteriorly at an angle. The scales of the serrate edge are striate while all other scales are strongly rugose or tubercular. A series of regular plates on the snout between the two series of canthal scales extend back to the level of the eyes. Despite the fact that the nasal is moved back and separated by one or two scales from the rostral, the two most anterior of these may be interpreted as a pair of internasals in contact mesially with each other, with the rostral anteriorly and with a median azygos frontonasal posteriorly. The latter scale is bounded laterally by two supranasal scales, the most anterior of which is in contact with the internasals. The frontonasal is followed by a pair of prefrontals. Although the supraorbital areas are not elevated, each is bounded by a curved series of eight somewhat enlarged scales, the two series normally separated by a single series of scales (one specimen has two immediately following the prefrontals).

The limbs are extremely long; the adpressed hind limb reaches beyond the tip of the snout. The subdigital lamellae have rounded blackish, horny knobs, usually in a single series but under the joints there may be one or more pairs. Two elongate keels appear on the enlarged scales following the claws.

In life the specimens were nearly uniform green, save for the white stripe from eye to shoulder, bordered above by a broad dark line which narrows posteriorly. A series of brown spots are present on the sutures between the labials, and a white stripe runs from axilla to groin on the ventrolateral line. The tail is green but the shade is a rather grayish green.

In two of the preserved specimens the green color is completely gone, and is replaced by a reddish brown on the back and sides, on which is superimposed five irregular diagonal blotches, each joining its fellow on the back, the spots outlined in black or brown color. The chin is flecked with red brown. The tail is indefinitely banded with darker. The labials have a bluish cast, while the chin and venter are reddish purple with some greenish blue evident midventrally, and posterior to the anus. A cream-white line runs from under the eye to the shoulder and a cream spot or line is present on the side of the neck, both of which are parallelled by a darker stripe. The ventrolateral white stripe (partly discontinued) is present on the ventrolateral surface.

The third specimen which has undergone a different preservation in a heavy salt brine has retained most of its life colors.

Ctenosaura acanthura (Shaw)

Lacerta acanthura Shaw, General Zoology, vol. 3, pl. 1, 1802, p. 216. (Type locality [restricted to] Tampico, Tamaulipas, México.)

Ctenosaura acanthura Sumichrast, Arch. Sci. Phys. Nat., vol. 10, pp. 49-50; Bailey, Proc. U. S. Nat. Mus., vol. 73, art. 12, 1928, pp. 9-16, pls. 3, 4.

Two specimens, a young (no. 344), and an adult (no. 345), are in the collection from Ebano, San Luis Potosí.

The male is very dark, and little trace of the dorsal pattern remains. The dorsal crest is from 8 to 13 mm. high, extending from the back of the occiput to a point slightly back of the level of the thigh. The spiny whorls of the tail are separated by three smooth rows, at base (for 2 or 3 whorls) and by two for nearly half the length. Beyond this point there is little differentiation in the transverse rows. The femoral pores are 7-6.

Crotaphytus collaris baileyi (Stejneger)

Crotaphytus baileyi Stejneger, N. American Fauna, no. 3, 1890, p. 103, pl. 12, fig. 1. (Type locality, Painted Desert, Arizona.)

One specimen, no. 336, is from Presa de Gaudelupe, S. L. P.

The species of *Crotaphytus* occurring in Eastern San Luis Potosí appears to agree more closely with the southwestern *C. collaris baileyi* rather than with *C. collaris collaris* which is the expected eastern species. However, it differs from *C. baileyi* in the following characters: The median scales between the supraocular areas are in two enlarged series which are almost completely separated by an intercalated series of scales. Only two pairs of scales touch for a part of their length; normally three or four pairs are in contact for their entire length.

The head is grayish or clay color with small black dots scattered on the top and sides. A double black collar is present, the anterior part formed by a series of dots. The posterior part is continuous on each side, but above is interrupted mesially. About six dim, narrow, light, transverse bars are present on the back, the intervening areas being dotted with rounded dim, gray spots. Between the shoulders there is a transverse row of contiguous black dots; two other rows across the back, the black dots in these, however, are separate and not especially distinct. The chin is clouded or mottled with gray and dull cream; the underside of the abdomen, and the underside of the hands and feet are a uniform creamy white. The tail is bluish gray with numerous small rounded darker spots.

Should the character of the intercalated median scale row on the head prove constant in a series, this lizard might well be recognized as a new form.

Holbrookia maculata approximans Baird

Holbrookia approximans Baird, Proc. Acad. Nat. Sci. Philadelphia, 1858, p. 253. (Type locality, "Lower Rio Grande.")
Holbrookia maculata approximans Stejneger, N. American Fauna, no. 3, 1890, p. 109.

A specimen, no. 340, was captured five miles NE of Cándido Navarro, and no. 574 near the city of San Luis Potosí.

The specimens appear to be typical and extend the known range of the species from Central Chihuahua and Coahuila considerably farther to the southeast.

Sceloporus jarrovii immucronatus Smith

Sceloporus jarrovii immucronatus Smith, Copeia, 1936, pp. 223-227. (Type locality "Ten miles north of El Pinalito, Hidalgo, México.)

Six specimens of this form (nos. 548-533) were taken in the general area of Pendencia and Ciudad Maiz in eastern San Luis Potosí (the elevation of no. 548 is 4,300 ft., two miles south of the village of Pendencia.) The specimens, while agreeing in most characters, do differ to some extent.

These constitute the first record of this subspecies in the state, although *Sceloporus jarrovii minor* is known to occur in the western part. This latter form is characterized by a wide black nuchal collar, six to eight scales broad. In this series the collars are only three or four scales broad. The head and neck of the females have numerous bluish white spots.

Sceloporus serrifer plioporus Smith

Sceloporus serrifer plioporus Smith, Field Mus. Nat. Hist. Zool. ser., vol. 26, July 27, 1939, pp. 212-214. (Type locality, Encero, Veracruz.)

A specimen from Ebano, no. 547, is referred to this form despite certain differences from the type. It is a male and somewhat discolored by formalin. The femoral pores are 10-11, and there are 32 scales from occiput to above vent. The posterior frontal is divided longitudinally and separated from the interparietal.

The nuchal collar is about four scales wide and bordered behind by a narrow light collar. A few lighter marks are present on head and neck; the dorsal scales are normally mucronate. The tail has about seven bluish bands separated by darker bands. The field notes state: "back pale green and yellow; blue on sides of belly."

While this is the first record for the state, it is known from southern Tamaulipas and northern Veracruz.

Sceloporus spinosus spinosus Wiegmann

Sceloporus spinosus Wiegmann, Isis, vol. 21, 1828, p. 370.
Sceloporus spinosus spinosus Martín del Campo, Anales Inst. Biol., México, vol. 8, 1937, p. 262; Smith, Field Mus. Nat. Hist., Zool. Ser., vol. 26, 1939, pp. 87-94, fig. 10.

One female specimen, no. 554, taken in the Charcas Region, in an arroyo near Charcas Mine, 6,900 ft. elevation, is referred to this species.

Sceloporus olivaceus Smith

Sceloporus olivaceus Smith, Trans. Kansas Acad. Sci., vol. 37, 1934, pp. 263, 277-279; and Smith, Field Mus. Nat. Hist., Zool. Ser., vol. 26, 1939, pp. 110-118, pl. 13.

A large male, no. 555, from near Pendencia is referred to this species. There are five supraoculars and the prefrontals are separated; the large bluish marks are separated mesially by an elongate light stripe divided by a very thin black line; the bluish spots themselves have some indefinite dark markings; and the dorsolateral light stripes are more or less distinct.

The scales of the head are black with narrow, greenish, transverse markings. One line crosses the prefrontals, one crosses the supraoculars and another discontinuous line crosses the parietals. The superciliary area has six or seven small greenish spots. Three definite greenish lines run from the eye down across the labials.

Sceloporus microlepidotus disparilis (Stejneger)

Sceloporus disparilis Stejneger, Proc. Biol. Soc. Washington, vol. 29, 1916, pp. 227-230. (Type locality, Lomita Ranch 6 mi. N, Hidalgo, Texas.)
Sceloporus microlepidotus disparilis Dunn, Proc. Acad. Nat. Sci. Philadelphia, vol. 88, 1936, p. 472.

The single specimen (no. 342) from Xilitla is a male having the femoral pores, 16-16; 68 dorsal scale rows from the parietal to the posterior line of the thighs; and 67 scale rows around the middle of the body.

The species has been reported previously from several localities in the state.

Sceloporus variabilis variabilis Wiegmann

Sceloporus variabilis Wiegmann, Herpetologia Mexicana, 1834, p. 51. (Type locality México, by inference.)
Sceloporus variabilis variabilis Smith, Proc. Biol. Soc. Washington, vol. 47, pp. 127-129.

This is one of the most common lizards of the northern edge of the plateau, and is represented by a large series of specimens (nos. 346-406 and 568-576). Of these 14 are from Ebano, 1 from 2½ miles south of Pendencia, while the remainder are from the Xilitla region. The species appears to remain active throughout the winter. In

November, 14 were taken; December, 1; January, 5; February, 3; March, 2; April, 28; and May, 18.

Specimens from Ebano and Pendencia have the femoral pores small, and the rim of the pore scale is broken posteriorly. Those from Xilitla have the pores twice as large as the Ebano specimens and the rim of the scale surrounding the pore is usually unbroken.

Cnemidophorus gularis gularis (Baird and Girard)

Cnemidophorus gularis Baird and Girard, Proc. Acad. Nat. Sci. Philadelphia, 1852, p. 128 ("Indianola and the Valley of the Rio Grande del Norte").
Cnemidophorus gularis gularis Cope, Proc. Acad. Nat. Sci. Philadelphia, 1892, p. 334.

The subspecies *Cnemidophorus gularis gularis* is represented by six specimens (nos. 535-540) as follows: four from Ebano, one from the "Charcas Region, desert at Morelos Mine," and one from the "San Luis Potosí Reservoir."

The younger specimens are typically striped. In the largest, and perhaps oldest, the stripes are missing and are replaced by numerous blue-white punctations scattered on the dorsal surface.

Ameiva undulata podarga Smith

Ameiva undulata podarga Smith, Univ. Kansas Sci. Bull., vol. 31, pt. 1, 1946, pp. 40-43, figs. 1D, 2A.

Six specimens (nos. 541-546) were obtained in the Xilitla region. The specimens appear to be typical of this form.

Xenosaurus newmanorum sp. nov.

Type: No. 499 Louisiana State University. Collected in the Xilitla region, San Luis Potosí, México.

Paratypes: Nos. 489-498; 500-504, L. S. U., same locality.

Diagnosis: Related to *Xenosaurus grandis* but with the following differences: supraocular scales smaller, never forming a continuous series of three or four, that are much wider than long; tail a little shorter and slenderer with 2-4 scales fewer in a whorl about tail near base; arm above nearly uniformly covered with large rounded scales, somewhat conical on dorsal surface, rather than with the tubercles spaced with the distance between nearly equal to diameter of the base of the tubercle; a pair of light spots beginning between auricular membranes and extending back for a distance less than, or equal to, their width; a broad distinct stripe begins near tympanum that runs up and back, approaching but not meeting its fellow behind posterior level of arm insertion; venter nearly uniform grayish white, instead of cream with numerous quadrangular black spots.

Description of the type: Dorsal outline of the head triangular or arrow shaped, the temporal region slightly curving and bulging out in front of the tympanum, which faces outward and backward; the canthus rostrailis is poorly developed and there is no canthus temporalis; rostral narrower than mental, 1½ times as wide as high, highest at median point, notched laterally above; no distinctly enlarged medial scale touching rostral; circumorbital rings moderately developed, separated by a single series of roughened scales; scales of dorsal surface of head rough, keeled, ridged, or somewhat conical, those in internasal and temporal regions largest and with a few scattered minute granular scales between; in temporal region, scales distinctly conical, separated by irregular rings of minute granular scales; median supraocular scales somewhat enlarged but not forming regular series, often subcircular and moundlike; superciliaries 11-11; 13-13 suboculars; nostril in single nasal; supralabials 13-13; infralabials, 11-12; a series of scales bordering supralabials above heavily ridged posterior to nasal; a row of enlarged scales begin behind eye and run back on temporal region, usually bordered by one row of scales on each side also somewhat enlarged.

Body covered with rounded or oval somewhat conical scales separated by smaller similar scales mixed with minute granules of varying size.

A skinfold on neck, with often another indistinct one preceding it; an average count of about 43 scales in a line between neck fold and tip of chin (counts may vary three or four scales if made at different points); beginning at about level of axilla, a series of transverse scale rows cross the ventral surface, terminating posteriorly at about the level of the groin. These individual scales are quadrangular and there are 18-20 in the widest rows; on sides they merge into the more rounded lateral scales; a lateral skinfold from axilla to groin along sides, running close to ends of ventral series.

On median ventral line 78 scales from base of tail to tip; 107 scales on dorsal part of tail; tail surrounded by whorls of scales, every other whorl breaking up into two rows on the sides so that the dorsal count is usually nearly a third greater than ventral; ventral part of tail compressed and narrowed.

Dorsal surface of arm regularly scaled, the tubercles in contact, with occasional granules in the interstices; on the posterodorsal part of thigh, tubercles are farther apart, not in contact.

Tympanum smooth not covered with granules, higher than wide, its greatest diameter equal or very slightly less than length of eye

orbit; fingers and toes well developed, somewhat angular, claws strong; 32 scales under fourth toe; toes of hind limb reaching half way between elbow and arm insertion when limbs are adpressed to body; maxillary-premaxillary teeth, 23 on each side.

Color: Head with a ground color of brownish gray; numerous dark brown flecks forming indistinct lines running back from eye and a large more or less distinct dark mark in the occipital region; back with five or six broad brown bands with deep black irregular edges and lineated series of black tubercles; eight dark bands round tail, the under parts of bands split with lighter color; the brown bands are separated by bluish gray bands that are diagonal on the sides and are interrupted medially on back by a very narrow streak of brown; these light bands may be edged with black and there may be some scattered black tubercles; chin, throat and venter dirty white or slightly bluish white. (Under a lens there is to be seen a fine, nearly uniform, scattering of pigment.)

The brown neck band is somewhat triangular; the middle one on the back tends to be partially divided by an extra gray band. Arms and legs indefinitely flecked with brown, black, and gray above, nearly uniform gray below; digits indefinitely banded with gray.

Measurements in mm.: Snout to vent, 112; tail, 106; head width, 25; head length to front edge of tympanum, 31; axilla to groin, 51; snout to forearm, 44; body width, 23; arm, 40; leg, 50.

Remarks: The differences between this form and the typical one occurring in Veracruz near Córdoba are numerous but not of great magnitude. Certain of these have been pointed out in the diagnosis; the following differences exist between *Xenosaurus grandis* and *newmanorum*: In *grandis* the head is more distinctly triangular, the canthus temporalis more distinct, and the sides of the temporal region more nearly vertical; the tympanum is entirely covered with a thin scaly membrane (apparently absent in *newmanorum* or if present, lacking scales); the area of small scales behind the vent is larger, arranged in seven or eight rows (usually only four, and the scales back of anal lip larger in *newmanorum*); the preanal scales more uniformly developed. In the basal portion of the tail every fifth whorl is divided, but in the remainder of the tail every other row splits. This takes place lower down on the side, often only the ventral median pair being undivided. The lower labials have a low lateral ridge, less conspicuous than that in *newmanorum*. The enlarged row of ridged scales below the infralabials

MEASUREMENTS AND SCALE DATA OF *XENOSAURUS NEWMANORUM* sp. nov.

No.	Snout to vent	Tail	Head width	Head length to ear	Supra-labials	Infra-labials	Transverse scale rows axilla to groin	Ventral caudals	Dorsal caudals	Scales from neckfold to tip of chin
499	112	106	25	31	13-13	11-11	36	78	107	45
496	110	101	24	30	14-13	10-10	35	79	109	40
492	110	102	26.5	31	14-15	10- 8	35	78	109	43
489	113	110	25	31	14-15	10-13	38	79	110	41
493	108	102	23	30.5	13-12	10-10	35	80	108	41
495	107	102	23	30.5	14-15	11-11	36	79	111	46
500	107	102	26	30	12-12	9-10	36	79	104	43
497	106	100	23	29	14-13	10-10	37	80	112	45
494	105	105	24	29	14-15	10-11	37	79	111	45
501	102	102	23	28	13-14	10-11	35	79	114	39
498	100	96	23	28	13-12	11-11	37	79	109	42
503	100	100	21	27.5	14-15	10-11	36	79	111	44

are wider than in *newmanorum*. The first and second pairs of chinshields are in contact with the infralabials, while those following are separated from the labials by the series of ridged scales. (In *newmanorum* there are eleven specimens in which only first pair touches labials; three in which one of second pair touches; in two, all the scales of the chin are distorted and seemingly abnormal.)

The genus is known from México and Guatemala. *Xenosaurus grandis* occurs in the region about Córdoba, Cuautlapan, Huanusco, Orizaba and Tehuantepec in México; *X. rackhami* is a Guatemalan species.

The specimens of *X. grandis* that I collected at Cuautlapan were ensconced between lamina of rock, where softer layers had been weathered away leaving narrow spaces between harder layers; it is not known whether a similar habitat is occupied by *X. newmanorum*.

The species is named for Mr. Robert Newman and Mrs. Marcella Newman who obtained the specimens.

Barisia imbricatus ciliaris Smith

Gerrhonotus levicollis ciliaris Smith, Proc. U. S. Nat. Mus., vol. 92, 1942, pp. 365-367. (Type locality, Sierra Guadalupe, Coahuila, México.)

Barisia imbricatus ciliaris Tihen, Amer. Mid. Nat., vol. (In press.)

This form, previously known from the "mountains near San Luis Potosí [city]" is represented in the collection by a specimen (no. 341) taken at an elevation of 7,000 feet between Llano de Coneja and Llano de Garzas in the Cerro Coneja region. It is a gravid female containing 11 well-developed embryos, probably about ready for birth since the yolk material seems to be entirely absorbed. One embryo measured 36 mm. from snout to vent, the total length being 98 mm.

The following characters are diagnostic:

Dorsal scale rows 16, the six median being strongly keeled, the adjoining rows lightly keeled; 12 ventral scale rows; a single pair of chinshields in contact medially, the upper largest. The measurements (in mm.) are: total length, 293; snout to vent, 115; vent to tip of tail, 178. The adpressed limbs fail to touch.

The azygos postmental present on the specimen is perhaps abnormal for this form since only in four of the eleven young is it present; and while two loreals are present in this specimen, one is the more usual number.

Gerrhonotus liocephalus loweryi Tihen

Gerrhonotus liocephalus loweryi Tihen, Trans. Kansas Acad. Sci., vol. 51, 1948, pp. 302-305.

This spendid series has recently been studied and named by Dr. Joseph Tihen. The type is LSU no. 480. The paratype series, LSU nos. 472-479, 481-485, 485a, 486-487. All are from the Xititla region. One specimen from Ciudad Maiz, no. 488, has been tentatively referred to this form, but it differs in a number of points. It is possible that these presumed differences are juvenile characters.

Eumeces tetragrammus (Baird)

Plestiodon tetragrammus Baird, Proc. Acad. Nat. Sci. Philadelphia, 1858, p. 256. (Type locality, Lower Rio Grande River.)

Eumeces tertagrammus Cope, Bull. U. S. Nat. Mus., no. 1, 1875, p. 45; Taylor, Univ. Kansas Sci. Bull., vol. 23, 1935 (Aug. 15, 1936), pp. 298-304, fig. 46.

An example of this species no. 343 collected at Ebano appears to be typical in coloration, and the scale data fall within the known limits of variation.

TESTUDINATA

Terrapene mexicana (Gray)

Cistudo (*Onychotria*) *mexicana* Gray, Proc. Zool. Soc. London, 1848 (Feb., 1849), pp. 16-17, pl. 2. (Type locality, México.)

Terrapene goldmani Stejneger, Proc. Biol. Soc. Washington, vol. 46, 1943, pp. 119-120.

Terrapene mexicana Müller, Zool. Anz., Bd. 113, Heft 5/6, 1936, pp. 97-114, figs. 1-4.

Three specimens of *Terrapene* are in the collections; no. 332 Valles, S. L. P.; nos. 333 and 334 being from Ebano, S. L. P.; while no. 335 was taken at Pujal, S. L. P.

Despite rather extraordinary differences in the general appearance, all three are referred to *Terrapene mexicana* (Gray), a species described nearly a hundred years ago from a specimen of unknown provenance in México. The type specimen has a dark brown carapace, the dorsal and lateral plates being spotted and rayed with cream. The scales on the arms are dark, and most of those on the anterior face of the arm bear a yellow or orange spot. Four claws are present on the fore foot. There are three claws on the hind foot.

Stejneger has described a *Terrapene goldmani* from "Chijol (or Chijoles), southeastern corner of the State of San Luis Potosí, México; in the coastal plain." This species also has only three claws on the hind foot. The carapace is nearly uniform "clay-color" with well-defined broad dark-brown margins to each plate along the seams. The color of the arms and legs is not mentioned.

Müller (*loc. cit.*) has reviewed a series of *Terrapene* collected for

the most part in the region about Tampico, Veracruz. He has concluded that *Terrapene goldmani* and *Terrapene mexicana* are synonyms. Whether he is correct in his interpretations cannot be decided on the basis of these specimens. The more outstanding characteristics of each of these is given.

No. 332 (collected by Chas. Shaw, Valles, San Luis Potosí, Oct. 11, 1946). This specimen has a high, laterally compressed carapace, with a continuous, flat crest on the second, third and fourth vertebral scales. The keel can be distinguished also on the first vertebral. A small nuchal is present. The marginal scales flare out posteriorly and are strongly serrate. The foot has three claws. The upper parts of the sides slope sharply, giving the carapace a tectiform shape.

The general color is yellowish olive, the sutures of all the plates being dark, black brown. The plastral plates are similarly colored, in that the posterior edges of the scutes and the median sutures are dark brown. The chin and lips are dull brownish-white without any markings. An indefinite grayish spot is present on each side of the mandible. The neck, arms, legs and feet are uniform olive-brown without trace of yellow spotting on scales. The top of the head is brown with some marbling of dirty cream. The tip of the snout and maxilla are light olive. The area about the nostrils is yellowish tan.

No. 333 from Ebano is the largest specimen. The carapace slopes regularly on the sides. The sutures are bordered by wide areas of dark black-brown. The scales on the front of the arms have yellow spots, or are yellow with darker edges. The top of the head and to a lesser extent the neck above, and side of head is covered with numerous black spots. A pair of vertical lines is present on the front of the beak which is very slightly notched. The plastron has a broad dark area bordering the sutures, but some yellowish areas are present near the outer border. The chin is whitish.

No. 334, from the same locality, lacks the dark stripes along the sutures but does show what appear to be remnant spots and rays of dark brown on a lighter olive ground color. The larger scales on the arms are blackish with yellow centers. The top of the head is more or less uniform bluish gray.

The specimen from Pujal (no. 335) has the dark stripes along the sutures rather indistinct and some indistinct darker markings suggesting spots or rays. There is a very small amount of dark brown on the carapace, scattered in irregular areas along the sutures. The throat is strongly reticulated with black.

A very slight longitudinal convexity is discernible crossing the upper half of the costals. The arms are spotted with yellow.

Measurements of Terrapene mexicana (Gray)

	no. 333	no. 334	no. 335	no. 332
Length of carapace	166	150	153	132
Length of plastron	164	138	142	126
Width of carapace	128	119	121	113
Width of plastron	94	85	87	81
Greatest height of carapace and plastron	88	72	78	82

SERPENTES

Leptotyphlops myopicus myopicus (Garman)

Stenostoma myopicum Garman, Mem. Mus. Comp. Zool., vol. 8, 1883, pp. 6, 130, 131. (Type locality Savineto, near Tampico, Tamaulipas.)

Leptotyphlops myopicus myopicus Smith, Field Mus. Nat. Hist. Publ., Zool. ser., vol. 29, 1944, p. 146.

An individual of this very rare species (no. 201) taken November 13, 1946, by Marcella Newman at Ebano, yields the following data:

Total length, 214 mm.; tail, 10.5 mm., head width, 3.5 mm., body width, 3.5 mm. Dorsal scales (transverse scale rows) total 120; on tail 14, the first pair following anus divided; others single. Anal a large undivided scale; 14 scales in a row about body. Width of rostral slightly more than one-third greatest width of head, extending back to level of eyes or slightly beyond; nasal completely divided, the suture passing from nostril reaches first labial, the upper part of scale much larger than lower, and separated from its fellow of the opposite side by a small prefrontal; supraocular small, much above level of eye; frontal about size of prefrontal; parietals wide, the anterior reaching the last (third) labial, each separated from its fellow of the opposite side; labial border formed by rostral, nasal, two anterior labials, the ocular, and third labial; rostral occupying greatest space, the third labial a slightly shorter space on the labial border.

The lower lip of this specimen is strongly notched mesially, with four infralabials on each side of the diminutive mental. The fourth labial is concealed entirely below the supralabials.

Constrictor constrictor imperator (Daudin)

Boa imperator Daudin, Histoire naturelle . . . Reptiles, vol. 5, 1803, pp. 150-152. (Type locality, México.)

Constrictor constrictor imperator Ihering, Rev. Mus. Paulista., vol. 8, 1910, p. 321.

Two specimens, nos. 202-203, are in the collection. The data on these two specimens are, respectively: Ebano, Xilitla; female, fe-

male; scale formula, 54-64-38; 56-66-36; ventrals, 230, 236; subcaudals, 53, 41+; supralabials, 21-19, 19-20; infralabials, 22-?, 23-22; total length, 1700, 1830; tail length, 160, 162+.

Adelphicos quadrivirgatus quadrivirgatus Jan

Adelphicos quadrivirgatus Jan, Arch. Zool., vol. 2, 1862, pp. 18-19, pl. 8; Elenco sist. ofidi, 1863, p. 32; Jan and Sordelli, Iconographie Générale des Ofidiens, livr. 11, 1865, pl. 3, fig. 5. (Type locality, México.)

Adelphicos quadrivirgatus quadrivirgatus Smith, Proc. Rochester Acad. Sci., 1942, pp. 188-192, figs. 3 and 6.

Smith, *loc. cit.*, notes that seven specimens of this species are known, four of them having been taken in Mexico, three in Chiapas. The known range extends from central Chiapas to Jicaltepec, central Veracruz. Two mutilated specimens in the collection, no. 205 from Ebano, and 206 from Xilitla, trace the range from Jicaltepec about 90 miles farther to the northwest. The latter half of the body of the Ebano specimen is missing; consequently the scale counts of this part are unknown, and the sex cannot be determined.

The general color is brownish-faun, most of the scales having more pigment on the edges than in the center. A nearly continuous black lateral line runs between the second and third scale rows, reaching to near the tip of the tail. A dorsolateral line begins near the parietal, and follows a course through the middle of the fifth scale row. The median dorsal scale row is pigmented slightly more than adjoining rows, but would not be described as bearing a stripe. The labials are cream, save for their brownish upper edges. The venter is white save for a fine zigzag line under tail. The top of the head is gray, the scales flecked with black.

The scale formula for no. 206 ♀ is 15-15-13; ventrals, 148; supralabials, 7-7; infralabials, 5 (the anterior chinshield bordering the mouth also); no preoculars, postoculars, 2; temporals 1+1; one loreal entering eye; anal divided. Tip of tail absent.

The mutilated specimen (no. 205) disagrees in no character that can be discerned.

Ficimia streckeri Taylor

Ficimia streckeri Taylor, Copeia, 1931, p. 5-7. (Type locality, 3 miles east of Rio Grande City, Texas); Mulaik and Mulaik, American Mid. Nat., vol. 29, no. 1, May, 1943, pp. 796-797.

Ficimia olivacea streckeri Smith, Publ. Field Mus. Nat. Hist., Zool. Ser., vol. 29, 1944, p. 139; Smith and Taylor, Bull. U. S. Nat. Mus., no. 187, 1945, p. 63.

A series of 10 specimens of this burrowing species was acquired in the Xilitla region. It is important since it gives a better idea of the range of variation in the form.

The preoculars are uniformly 1-1; the supralabials 7-7 save in no. 221, which has the first three fused into a single scale; infralabials, 7-7, save in one specimen with 7-8 on one side. There is no loreal.

Data on Ficimia streckeri Taylor

No.	Sex	Post-ocular	Scale formula	Ventrals	Caudals	Total length	Tail length
207	♂	1-1	19-17-17	146	34	139	22
208	♂	2-2	19-17-17	144	36	418	69
209	♂	2-2	17-17-17	148	36	424	66
210	♂	2-2	17-17- ?	154	37	443	68
211	♂	2-2	19-17-17	150	36	251	38.5
212	♂	1-1	18-17-17	147	38	470	75
213	♂	2-2	19-17-17	150	36	483	74
214	♂	2-2	19-17-17	144	36	372	59.5
215	♀	1-1	17-17-16	155	32	390	55
216	♀	2-2	19-17-17	154	30	250	31.5
217	♀	1-1	19-17-17	157	34	450	60

These specimens differ in some characters from those in the type area in south Texas. Muliak and Muliak, *loc. cit.*, give data on a series of specimens (over 30?). A comparison of their ventral counts and subcaudal counts with the Xilitla series is given. Numbers in parentheses are averages.

Texas	♂ ♂	128-144	....	35-40	....
Xilitla	♂ ♂	144-154	(148)	34-38	(36)
Texas	♀ ♀	144-150	....	30-34	....
Xilitla	♀ ♀	154-157	(153.3)	30-34	(32)

In Texas specimens the supralabial number is 7; infralabials, 8 most frequently, with 7-7, or 7-8 less often; preoculars, 1; postoculars, 1 (one exception); temporal formula, 1+2.

The Xilitla specimens have, normally, supralabials 7; infralabials, 7 (one exception, on one side); preoculars, 1; postoculars, 2-2 in 7 and 1-1 in 4 cases; the usual temporal formula is 1+2.

Smith, *loc. cit.*, has recently associated this form with *Ficimia olivacea* as a subspecies on the basis of presumed intergrades between the two species. He is followed in this by Smith and Taylor, *loc. cit.* However, this lot of material seems to show no evidence of intergradation, and even with the loss of much of the dorsal color pattern as occasionally occurs, there is no approach to the more narrow, flatter-headed species with a differently colored, more slender body.

Schmidtophis genus novum

Maxillary teeth eight or nine, decreasing in size posteriorly. Head moderately elongate, scarcely distinct from neck. Eye small with an elliptic pupil. Scales without striations, but with dim keels in 15 rows; large paired marginal "pits" on many if not all scales of

anterior part of body; scale row formula, 15-15-15; ventrals rounded; anal single; tail short with subcaudals in two rows; prefrontals fused entering eye; loreal entering eye, no preoculars; supraocular and postocular present, not fused; no anterior temporals. Nasal at least partially divided.

The relationship of the genus is with *Geophis* and *Chersodromus*.

The genus is named for Karl Patterson Schmidt.

Schmidtophis rubriventris sp. nov.

Type: Louisiana State University No. R. 577. Collected near Xilitla (Xilitla Region) San Luis Potosí, México, by Charles Shaw.

Diagnosis: Characters of the genus. A very broad rostral one third broader than high, one subtriangular supraocular; one postocular much higher than long; frontal as long as its distance from internasals; body scales lightly keeled, save entire outer row, and part of second row; no primary temporal. Body black, venter pink, a white band across middle of parietals joining the white of throat. Scales in 15 rows; 6-6 supralabials. Ventrals, 125, caudals, 41.

Description of type: Rostral broader than long, the part visible above broad and narrow, its posterior border forming a very oblique angle; internasals small, about one and one-half times as wide as long; prefrontals fused together, the anterior border of scale somewhat convex, the posterior border somewhat concave; frontal rather small, subtriangular, the anterior border slightly curved, its width greater than its length, its length equal to its distance from internasals; supraoculars rather large, subtriangular; length of parietals equal to their distance from internasals; nasal large, at least partially divided, the length of its rostral border greater than its distance from eye, the anterior part greater in area than posterior part; loreal large, nearly rectangular (the lower edge slightly angular), a little longer than high, entering eye; postocular at least twice as high as long; fifth labial broadly in contact with parietal; no primary temporal, one secondary temporal shaped like a body scale; six supralabials, in the following ascending order of size: 1, 2, 3, 4, 6, 5; the third and fourth supralabials enter eye; seven infralabials, in following ascending order of size: 2, 1, 3, 4, 6, 7, 5, the first pair in contact behind the small mental; first pair of chinshields relatively large, bordered by five infralabials; second pair of chinshields less than half size of first pair, in contact with each other. The scales are smooth and lack any trace of striation; and the keel is weak, but somewhat more pronounced posteriorly; outer row and

part of second not keeled. Scale formula, 15-15-15; ventrals, 125; anal undivided; subcaudals, 41+1.

Color: Color deep slate-black on dorsum and sides; a white band with irregular borders crosses the back part of head on parietals passing down on throat where it widens, covering about four ventrals and the posterior chinshields; head and supralabials black; infralabials grayish black with a light area on mental and light areas on last three infralabials; first pair of chinshields whitish with grayish black anterior borders; ventrals and subcaudals uniform pink, the outer edge of ventrals colored like lateral scales.

Teeth: The short maxillary bears six teeth, with places for two or three more. Anterior teeth larger, very slender, curved, growing smaller posteriorly.

Measurements in mm.: Total length, 308; tail, 68; width of head, 6.3; length of head, 8; diameter of eye, 1.2.

Remarks: This novelty seems to mimic *Chersodromus leibmannii* (Reinhardt), which may occur in the same locality but the nearest point at which the latter has actually been found is in central Veracruz about 180 miles to the southeast.

The chief generic characters by which it differs from *Chersodromus* are: smooth instead of finely striated scales; absence of an anterior temporal allowing the fifth supralabial to form a long contact with the parietal; the smaller series of maxillary teeth, decreasing in size posteriorly; and the reduction of the scale rows from 17 to 15; the supraocular and postoculars separate rather than fused.

There is some similarity to certain members of the genus *Geophis*, especially those lacking anterior temporals. However the fusion of the prefrontals in this species would prevent confusion with these forms.

Geophis multitorques (Cope)

Rhabdosoma multitorques Cope, Proc. Amer. Philos. Soc., vol. 22, 1885, pp. 384-385. (Type locality, Zacualtipan, Hidalgo.)

Geophis multitorques Günther, Biologia Centrali-Americana, Reptiles, 1893, p. 93; Smith, Proc. New England Zoöl. Club, vol. 18, 1941, pp. 53-55.

Two specimens, nos. 218 (young) and 219 (adult female), from the Xilitla region, are referred to this species. The scale data of the two specimens agree for the most part.

The scale formula is 17-17-17; supralabials, 6; infralabials, 7; no preocular; postocular, 1; temporals, 1+2; second pair of chinshields in contact. The ventrals of no. 218 are 174, of no. 219, 177; caudals are 30 in both. The measurements (in mm.) are, respectively: total length, 171, tail, 21; 443, tail, 51.5.

Above, the color is brownish black to black, the skin between the scales being lighter. A parietal collar is present in no. 218 covering about half the length of the parietals. It crosses the sides of the mouth and widens to encompass the greater part of the underside of the head. In both, the ventral surface of the body is black or blackish brown with numerous white areas. These are sometimes arranged as alternate spots, often contiguous or narrowly separated, sometimes confluent. The undersurface of the tail is nearly uniform black.

Ninia diademata plorator Smith

Ninia diademata plorator Smith, Copeia, 1942, no. 3, Oct. 8, pp. 152-154. (Type locality, Durango, Hidalgo, México.)

In defining this subspecies, Smith, *loc. cit.*, had data from but two specimens. The present series of six from the Xilitla region of San Luis Potosí contribute to a better understanding of the variation in the form.

The color of all the specimens agrees with that given for the type. The scale formula, 19-19-19, is invariable (stated in error by Smith, "18 scale rows" in the diagnosis, but given correctly in the description). The supralabials are 6-6 in five, 6-5 in one, specimen. Thus the count of five supralabials in the type is apparently not the normal condition for the subspecies. Six infralabials are present. The temporals are constantly 1 + 2, no preocular, 2 postoculars, the upper the larger. Four labials touch the anterior chinshields. In these characters, agreement with the type is complete. There are invariably two pairs of chinshields, the anterior much the larger.

Data on Ninia diademata plorator Smith

No.	*Sex*	*Locality*	*Ventral*	*Caudal*	*Total length*	*Tail length*
220	♂	Xilitla region	133	83	254	82
221	♀	Xilitla region	130	81	315	100
222	♀	Xilitla region	129	74	290	88
223	♀	Xilitla region	137	73	312	89
224	♂	Xilitla region	125	88	302	98
225	♂	Xilitla region	128	93	225	78

The variation in the ventral and caudal scale counts (including data on the types) is as follows: 123-133, 83-93 for males; 129-137, 73-81 for females.

The counts in the form *Ninia diademata diademata* are distinctly higher (136-145; 86-97 for males; 136-159; 79-96 in females). The averages for these data are:

N. d. plorator .....126.8—87.6 for males; 132—72 for females.
N. d. diademata .....141.8—91.4 for males; 149.5—86.3 for females.

The stomachs of three of the specimens contained remains of small slugs. One specimen contained oviductal eggs.

This is the first record of the species for the state.

Rhadinaea crassa Smith

Rhadinaea crassa Smith, Proc. Biol. Soc., Washington, vol. 55, 1942, pp. 190-191, fig. 3, 4. (Type locality Durango, Hidalgo, México.)

This recently described species has been known previously from five specimens, one of which, a paratype, is from Ciudad Maiz, in San Luis Potosí. Three more specimens, nos. 262, 263, and 264, have been collected by Mrs. Marcella Newman in the Xilitla region. All are males and appear to have a larger series of ventrals than the more typical, described specimens.

The following characters are invariable in the three: supralabials, 8-8; infralabials, 9-9; preocular, 1; postoculars, 2; temporals, 1+2; loreal, 1; anal, 2; five scales touch the anterior chinshields; scale formula, 17-17-17.

Data on Rhadinaea crassa Smith

No.	*Sex*	*Locality*	*Ventrals*	*Caudals*	*Total length*	*Tail length*
262	♂	Xilitla	185	91	587	176
263	♂	Xilitla	181	94	545	162
264	♂	Xilitla	184	92	587	176

The color patterns of these three specimens agree with each other, and likewise with that of the type specimen.

Females of a snake species usually have a higher average number of ventral scales than the male. In the three typical specimens of *R. crassa* from which data on ventral counts are available, all are females, and the range of the ventral counts is 166-173, average 170.6. It is presumed that typical males would have a lower average.

In these Xilitla specimens the range for three males is 181-185 with an average of 183.3, a difference of at least 13 ventral scales greater than the females of the species. It may also be larger than the average for typical males.

Rhadinaea decorata (Günther)

Coronella decorata Günther, Catalogue of the snakes of the British Museum, 1858, pp. 35-36. (Type locality México.)

Rhadinaea decorata Cope, Proc. Acad. Nat. Sci. Philadelphia, vol. 15, 1863, p. 101.

This species, not previously known from the state, is represented by three male specimens (nos. 265-267), all from the Xilitla region. They extend the known range approximately 100 miles to the northwest. To the south the species reaches to Costa Rica.

These specimens agree with the more southern specimens in having the scale formula, 17-17-17; supralabials, 8-8, infralabials, 10-10, five touching the first chinshields; preoculars, 1-1, postoculars, 2-2, temporals, 1+2.

Only one specimen, no. 266, has the tail complete. The ventral counts for the specimens nos. 265, 266, and 267 are, 126, 118, 121, respectively. The caudals for no. 266 are 121. The ventral coloration of the preserved specimens is creamy white. The color in life was not recorded.

The stomachs of two specimens contained the partially digested remains of earthworms.

Rhadinaea marcellae sp. nov.

Holotype: Louisiana State University no. 270, from Xilitla region, San Luis Potosí, México, May 12, 1947. Collected by Marcella Newman.

Diagnosis: Dorsolateral light line on head beginning on the snout, running through upper edge of eye to behind mouth angle, then back and upward to join the lateral body stripe, which occupies the fifth rows and is composed of a series of disconnected light spots each covering about half of a scale; a nuchal white black-edged collar connecting the ends of the lateral body stripes; head with a somewhat elaborate stippled pattern; outer edge of ventrals dark, the area intensified at the posterior outer edges of the scales. Black dots on most of the supralabials, and smaller spots on mental and three first infralabials; 2 preoculars, the lower small; ventrals, 128; caudals, 78; four infralabials touch first chinshields.

Description of the type: Rostral wider than high, visible only as a narrow line when seen from above; internasals more than half of the length of the prefrontals; frontal one third longer than wide, about one third longer than its distance from the tip of the snout; parietals a little longer than their distance to the tip of the snout; nasal divided; loreal quadrangular; two preoculars, the lower very small, separating the third labial from the orbit; two postoculars, the upper more than three times area of lower; anterior temporal large, followed by two smaller temporals; 8-8 supralabials, the sixth and seventh very large and subequal in area, the fourth and fifth form the lower border of the orbit; eye very large, greater than its distance to the anterior edge of the nostril; 8-9 infralabials; two pairs of chinshields, the anterior broader, but somewhat shorter than the posterior; 4 labials touching anterior chinshields. Scale formula, 17-17-17. Ventrals, 128; caudals, 78; anal divided.

Total length, 290 mm., tail, 93.

Color and markings: A line from tip of snout through upper part of the eye, then diagonally to behind mouth angle, then back and

up joining the lateral body line; a black-edged white nuchal collar joining the ends of the dorsolateral lines which are very narrow (about the width of half a scale), formed of a series of small separate whitish spots each about half the area of one scale, and following the fifth scale row. Below this a very narrow dark line, less than half a scale in width, and covering part of lower edge of the fifth and the upper edge of the fourth scale row. All scales on body have the borders darkened somewhat, those of the median dorsal row visibly darker than others, making a dim median stripe; scales of the nine median rows discernibly lighter than the lateral scales; edges of the ventrals with pigment, intensified more or less into an elongate spot on outer edge. Top of head with an elaborate scroll-like pattern; a pair of fine light spots on parietals and two lighter-centered dark spots on each prefrontal; the dark band in front of eyes is continuous across the end of the snout; upper edges of supralabials with a series of black spots on the white supralabial band; entire ventral surface immaculate.

Remarks: The nuchal collar, the head pattern, the presence of two preoculars and the greatly reduced ventral series seem to separate this form from other known species of *Rhadinaea.*

Rhadinaea lachrymans has a nuchal collar but lacks the line from the eye connecting with the lateral line, but it has fewer labials (7), one instead of two preoculars, a higher series of ventrals (159-164) (caudals 84-95) and a completely different body pattern.

While it differs strikingly from the head and body pattern of *Rhadinaea decorata,* the reduced ventral count (128) falls into the known range of that form (113-130; 86-123 caudals).

The species apparently belongs in the group to which *R. crassa, R. forbesi, R. gaigeae, R. quinquelineata* and *R. montana* belong, and its closest relationship is probably with *crassa.* This species however lacks a nuchal collar and has a higher ventral count. The general color pattern is similar but the details of the pattern differ.

Thalerophis mexicanus mexicanus Duméril, Bibron, and Duméril

Leptophis mexicanus Duméril, Bibron and Duméril, Erpétologie Générale, vol. 7, pt. 1, 1854, pp. 536-537. (Type locality, México.)

Leptophis mexicanus mexicanus Oliver, Occ. Papers Mus. Zool. Univ. Michigan, no. 562, 1942, p. 10.

A series of seven specimens were obtained in the Xilitla region.

The scale formula is 15-15-11; preoculars, 1; postoculars, 2; loreal, 1; anal, 2; 5 labials touching first chinshields. These characters are invariable.

Data on Thalerophis mexicanus mexicanus Duméril, Bibron and Duméril

No.	*Locality*	*Sex*	*Ventrals*	*Caudals*	*Supra-labials*	*Infra-labials*	*Total length (mm.)*	*Tail length (mm.)*
251	Tamuin	♀	173	164	8-8	10-10	337	123
252	Xilitla	♀	175	163	8-8	10-10	984	373
253	Xilitla	♂	163	167	8-8	10-10	1231	496
254	Xilitla	♂	164	154	8-8	11-11	1122	...
255	Xilitla	♀	176	164	9-8	10-10	1277	490
256	Xilitla	♂	168	160	8-8	11-11	...	...
257	Xilitla	yg.	163	164	8-8	10-10	227	141

Dryadophis melanolomus veraecrucis (Stuart)

Eudryas boddaerti mexicanus Stuart, Occ. Papers Mus. Zool. Univ. Michigan, no. 254 1933, pp. 8-9. (Type locality, Zacualpan, Veracruz, México.)

Dryadophis melanolomus veraecrucis Stuart, Misc. Publ. Mus. Zool. Univ. Michigan, no. 49, 1941, pp. 91-93, pl. 4, fig. 6, map 4 (substitute name for *mexicanus*).

Sixteen specimens, all from the Xilitla region, are in the collection. The young specimens have a white line from the tip of the snout along the lip that continues as a narrow line on the neck for a distance equal to 16 transverse scale rows. This line is interrupted beneath the eye by a black inverted "V." A series of white marks are present on the lower lip, and also on many of the chin scales, continuing on to the first part of the ventral series where they are larger and arranged in two rows.

Except for the labial line, some trace of this juvenile pattern can be discerned in certain adult specimens.

The scale formula is invariable 17-17-15 in the series. There is no variation in the following characters: preocular, 1; postoculars, 2; loreal, 1; anal, 2. The temporal scales, however, are variable. The formula $\frac{2}{1} + 2$ is most frequent, but $2 + 2$ occurs nearly as frequently and $2 + 2 + 2$ is found in four cases. Five scales are invariably in contact with the chinshields.

Data on Dryadophis melanolomus veraecrucis (Stuart)

No.	*Sex*	*Ventrals*	*Caudals*	*Supra-labials*	*Infra-labials*	*Total length*	*Tail length*
232	♂	178	...	9-9	10-10	....	...
233	♂	174	94+	9-9	11-10	1234	396+
247	♂	169	105	9-9	11-11	1061	324
234	yg.	180	71+	9-9	11-10	435	120
235	♂	176	111	9-9	11-10	1038	318
236	♂	177	103	9-9	11-11	939	284
237	♂	171	104	9-9	10-10	1100	333
238	♂	178	105	9-9	11-11	1131	330
239	♂	177	96+	9-9	10-11	1066	314+
240	yg.	174	104	9-9	10-10	611	180
241	♂	173	110	9-9	11-10	1086	315
242	♂	177	93+	9-9	11-10	1095	314+
243	♂	172	98	9-9	10-10	1173	342
244	♂	176	105	9-10	11-11	1209	368
245	♂	181	...	9-9	10-10	....	...
246	♀	179	102	9-9	11-11	1095	325

Drymarchon corais erebennus (Cope)

Spilotes erebennus Cope, Proc. Acad. Nat. Sci. Philadelphia, vol. 12, 1860, p. 342. (Type locality, Eagle Pass, Texas.)

Drymarchon corais erebennus Smith, Journ. Washington Acad. Sci., vol. 31, 1941, pp. 478-479, map, fig. 2.

Three specimens (nos. 248-250) were collected in the Xilitla region. The following characters are invariable in the specimens: preocular, 1; postoculars, 2, temporals, 2 + 2; supralabials, 8; infralabials, 8.

Data on Drymarchon corais erebennus (Cope)

No.	*Sex*	*Ventrals*	*Caudals*	*Scale formula*	*Total length*	*Tail length*
248	♀	182	65	19-17-14	1510	270
250	♂	187	65	18-17-14	1544	298
249	♀	191	65	17-17-14	1804	281

Spilotes pullatus mexicanus (Laurenti)

Cerastes mexicanus Laurenti, Specimen medicum exhibens synopsin reptilium, 1768, p. 83. (Type locality, México.)

Spilotes pullatus mexicanus Amaral, Mem. Inst. Butantan, vol. 4, 1929, pp. 282-284, fig. 2.

Two large specimens from the Xilitla region give the following scale data:

Data on Spilotes pullatus mexicanus (Laurenti)

No.	*Sex*	*Ventrals*	*Caudals*	*Supra-labials*	*Infra-labials*	*Total length*	*Tail length*
260	♂	202	124	8-8	9-8	2080	565
261	♂	205	121	8-8	9-8	1990	530

The preoculars and postoculars are 1 and 2, respectively, and the scale formula is 16-18-12 in both. The coloration is normal for the subspecies. There is a tendency for the posterior labials to fuse with the temporals.

Pituophis deppei jani (Duméril)

Elaphis deppei Duméril, Mem. Acad. Inst. France, vol. 23, 1853, p. 453. (Type locality México.)

Pituophis deppei deppei Stull, Occ. Pap. Mus. Zool. Univ. Michigan, No. 250, 1932, pp. 1-2.

A single specimen (no. 258) taken in the region near Ciudad Maiz by Mr. Charles R. Shaw, is the first record of this subspecies for the state. While the specimen is anomalous in certain respects, I believe it is correctly referred to this form.

In coloration and markings it agrees reasonably well with specimens from Tamaulipas listed by Stull, *loc. cit.* The top and sides of the head are nearly uniform faun, with the labial region largely cream, but with the pigment intensified on part of the supralabial and infralabial sutures. The light spots are for the most part "en-

closed" by the dark blotches, especially in the middle and posterior parts of the body.

The prefrontal scales, however, are four instead of two, with a small azygos scale just behind the internasal suture. There are eight supralabials; 11-12 infralabials. The scale formula is 29-27-21. Ventrals, 235; caudals 62; anal single; 31 body blotches, black anteriorly, lavender posteriorly; 9 blotches on tail, darker than those preceding.

Drymobius margaritiferus margaritiferus (Schlegel)

Herpetodryas margaritiferus Schlegel, Essai sur la Physionomie des Serpens, vol. 2, 1837, p. 184. (Type locality unknown [stated New Orleans, in error].)

Drymobius margaritiferus margaritiferus Smith, Proc. U. S. Nat. Mus., vol. 92, 1942, p. 383.

The scale formula of all of these specimens is 17-17-15; five labials touch the first chinshields. The temporal formula is 2 + 2 or 2 + 1 + 2. One specimen has 3 postoculars instead of the normal number of 2 on one side. This extra scale apparently is segmented from the sixth labial.

Data on Drymobius margaritiferus margaritiferus (Schlegel)

No.	*Locality*	*Sex*	*Ventrals*	*Caudals*	*Supra-labials*	*Infra-labials*	*Total length*	*Tail length*
226	5.4 mi. W. Ebano	yg.	154	120	9-8	11-11	317	105
227	Xilitla	♂	148	115	9-9	10-10	729	263
228	Xilitla	♂	154	...	9-9	11-11	...	...
229	Xilitla	♂	153	122	9-8	9- 8	900	326
230	Xilitla	♂	153	113+	9-9	10-10	726	239*
231	Xilitla	♀	150	109	9-9	11-11	1157	390

* Extreme tip missing.

Lampropeltis triangulum arcifera (Werner)

Coronella micropholis arcifera Werner, Zool. Anz., vol. 26, 1903, p. 250. (Type locality, México.)

Lampropeltis triangulum arcifera Smith, Proc. Rochester Acad. Sci., vol. 8, Sept. 10, 1942, pp. 175-207.

A series of 5 specimens obtained from the Xilitla region are referred to *Lampropeltis triangulum arcifera* (no. 278) or are presumed intergrades between this species and *L. t. polyzona* (nos. 279-282).

No. 278. This specimen may be regarded as *Lampropeltis triangulum arcifera*. In this the black bands are as wide or wider than the red bands save in the first. Fifteen of the red bands are interrupted by black on the medial line. All red bands save first on tail are interrupted or suppressed completely. The nuchal red band is much reduced, its width being equivalent to five scale lengths.

No. 279 has a number of the dark bands reaching a width equal to that of the red bands and toward the posterior part of the body one or two of the black bands are separated by less than the length of one red scale. The tail has six white bands, and three of the black tail bands are split with red.

No. 280 is similar to this, but more of the red bands are wider than the black ones; three of the black bands are split with red.

No. 281 is similar to the preceding but there are eight white bands on the tail, and only one is partially split with red. The black and red bands are more nearly equal in width. Anteriorly, however, the red bands are wider.

In no. 282, many of the black bands meet (thus dividing the red band) or they are narrowly separated. There are five white bands on the tail, and the red is suppressed except on two of the black bands.

The exact localities for these snakes is not available, the labels bearing the notation Xilitla region. It is not known whether the *t. polyzona* and *t. arcifera* were taken in the same exact locality or whether they were separated by some considerable difference in altitude.

Data on Lampropeltis t. arcifera and intergrades

No.	*Sex*	*Scale formula*	*Ventrals*	*Caudals*	*White body bands*	*Tail bands*	*Temporals*	*Total length*	*Tail length*
281	♂	21-21-19	213	58	22	8	2 + 3	976	125
282	♂	21-21-17	213	51	22	5	2 + 3	1010	152
279	♂	22-21-17	215	49+	23	5	2 + 2	1176	155+
280	♀	22-21-19	208	60	18	5	2 + 2 (2 + 1)	682	115
278	♀	22-21-19	208	55+	25	8	2 + 3 (2 + 3)	540	85+

Lampropeltis triangulum polyzona Cope

Lampropeltis polyzona Cope; Proc. Acad. Nat. Sci. Philadelphia, vol. 12, 1860, p. 258. (Type locality, Cuatupe, near Jalapa, Veracruz.)

Lampropeltis triangulum polyzona Dunn, Occ. Pap. Mus. Zool. Univ. Michigan, no. 353, 1937, p. 1.

Four specimens from the Xilitla region are referred to this subspecies (nos. 274-277). They are in general agreement as to the color pattern. This consists of black-white-black bands, separated by red bands. In each case the red bands are wider, usually much wider, than the bordering bands. The black bands are somewhat wider medially than on the sides or ventrally. All of the specimens have the scale formula 21-21-17.

The anterior red bands are eight to ten scale lengths wide; the light bands usually one and one-half to one scale length wide. All the scales of the red bands are black-tipped and the same is true of the scales of the white bands. On the venter the white bands oc-

cupy one or two ventrals; when only one ventral is covered, some parts of the adjoining ventrals may be white.

The specimens have from 18 to 20 white bands on the body, and four to six white bands on the tail (possibly all with six, since the tail tips are missing in three). Three of the black tail bands are "split with red" of varying width. The ventrals may show darker edges or there may be flecks of black on both red and white scales.

One might expect the range of *Lampropeltis triangulum annulata* to extend south from Tamaulipas and Nuevo León into the northern and eastern part of San Luis Potosí, but as yet none has been found referable to this subspecies.

Data on Lampropeltis t. polyzona (Cope)

No.	*Sex*	*Ventrals*	*Caudals*	*White body bands*	*White tail bands*	*Temporals*	*Total length*	*Tail length*
274	♂	220	52+	18	5	2 + 2 + 3	845	112+
275	♂	213	47+	20	4	2 + 1 + 3	746	132+
276	♂	212	50+	20	4	2 + 3	975	138+
277	♂	214	63	19	6	2 + 3	927	158

Elaphe flavirufa (Cope)

Coluber flavirufus Cope, Proc. Acad. Nat. Sci. Philadelphia, vol. 18, 1866 (1867), p. 319. (Type locality Yucatán.)

Elaphe flavirufa flavirufa Smith, Copeia, 1941, no. 3, p. 132, fig. 2.

Two specimens, no. 271 ♂ and no. 272 ♀, obtained in the Xilitla region, are the first state records.

Scale data for the two, respectively, are as follows: scale formula, 26-29-21, 27-31-23; ventrals, 254, 253; caudals, 108, 105; supralabials, 9-9, 10-9; infralabials, 12-12, 13-14; preoculars, 1-1, 1-1, postoculars, 2-2, 2-2; temporals (somewhat irregular), 3 + 4, 2 + 3; spots on body, 36, 37; spots on tail, 18, 17; total length (in mm.), 632, 1242; tail, 134, 265.

Elaphe laeta laeta (Baird and Girard)

Scotophis laetus Baird and Girard, Catalogue of North American Reptiles, 1853, pp. 77-78. (Type locality, Red River, Arkansas.)

Elaphe laeta laeta Woodbury and Woodbury, Proc. Biol. Soc. Washington, vol. 55, 1942, pp. 139-140.

This specimen (no. 273), the first recorded for the state, was taken at Ebano in the extreme northeastern part. It is a female having 230 ventrals and 70 caudals. The scale formula is 25-27-19; the supralabials and infralabials are 8 and 10 respectively. There are 41 body blotches and 17 blotches on the tail, the most posterior ones being too indistinct to be counted. One preocular and 2 postoculars are present. The total length is 437 mm.; the tail, 71 mm.

Pliocercus laticollaris Smith

Pliocercus elapoides laticollaris Smith, Proc. Biol. Soc. Washington, vol. 54, 1941, pp. 122-123, and vol. 55, 1942, p. 160.

The finding of a specimen of this rare snake at Xilitla by Charles R. Shaw traces its distribution to the northwest nearly three hundred miles, and adds an interesting species to the fauna of the state.

There is a white band, bearing a fine peppering of pigment, that crosses the back of the head involving all of the parietals save their anterior edges, and including the anterior part of the first scale row following the parietals. The band is continuous with the white color which covers the chin, the lower lip and most of the upper lip. The rest of the head is coal-black.

The body pattern consists of yellow or cream-edged black rings. The black covers from 3 to 3½ scale rows, the cream usually only one-half scale row. The intervening spaces are red in color, forming bands around the body that cover six transverse scale rows. Each red scale bears a black dot.

The black bands are incomplete in the region anterior to the anus, and this space on the venter is creamy white involving parts of four ventrals. Altogether, there are 16 black body bands (including the nuchal) and 15 red bands. On the tail the black bands have wider cream borders and are continuous around the tail; but the last five are reddish dorsally, with rather heavy, dark flecks, and cream on the ventral side.

Scale data: ventrals, 136; caudals, 85; preoculars, 2-1, the lower on the right side small, wedged in between third and fourth labials; supralabials, 8-8; infralabials, 8-8; total length, 541 mm.; tail, 193 mm.

This specimen differs from the southern (Tabasco) specimens in having eight instead of ten labials both above and below. The wide distribution of *laticollaris* with at least two other forms intervening in the territory, *elapoides elapoides* and *elapoides celatus*, strongly suggests that the form should be regarded as a species rather than as a subspecies.

Thamnophis scalaris scaliger (Jan)

Tropidonotus scaliger Jan, Elenco sistematico degli Ofidi, 1863, p. 70. (Type locality unknown.)

Thamnophis scalaris scaliger Smith, Zoologica, vol. 27, 1942, pp. 103-104; Smith and Taylor, U. S. Nat. Mus. Bull., no. 187, Oct. 5, 1945, p. 167 (doubtful reference in San Luis Potosí).

A series of specimens, taken in the general region of Xilitla and Cerro Conejo, are referred to this subspecies.

In four specimens the scale formula is 19-19-17, one only having

16 scale rows anterior to the vent. The upper labials are 8-8, save in one where the number seven occurs on one side. The lower labials are 10-10, with two exceptions; in these nine are present on one side.

The ventral averages are somewhat higher than those given by Smith (*loc. cit.*, p. 103). The ventrals are 151-162; the caudals, 71-72, in males. The ventrals are 151-157; the caudals, 65-66, in females. There is an increase of one in the number of upper labials.

Data on Thamnophis scalaris scaliger (Jan)

No.	*Sex*	*Locality*	*Ventrals*	*Caudals*	*Preoculars*	*Postoculars*	*Temporals*	*Length*	*Length*
291	♀	Cerro Conejo	157	66	1-1	3-3	1 + 2	...	...
292	♂	Cerro Conejo	162	71	1-1	3-3	1 + 2	676	102+
293	♀	Xilitla	154	65	1-1	3-3	1 + 2	612	129
294	♀	Xilitla	151	41+	1-1	3-3	1 + 2	676	102+

Thamnophis phenax phenax (Cope)

Eutaenia phenax Cope, Proc. Acad. Nat. Sci. Philadelphia, vol. 20, 1868, p. 134. (Type locality, Córdoba, Veracruz, México.)

Thamnophis phenax phenax Smith, Zoologica, vol. 27, 1942, pp. 99-100.

Four specimens of this rare snake have been taken in the Xilitla region. One (no. 284) bears the notation "Miramar 4,500 ft."

The scale formula is 19-19-17 in three specimens; one specimen has the rows reduced to 15 in front of vent; supralabials, 8-8; infralabials, 10-10, or 9-10; preoculars, 1; postoculars, 3. The temporals are 1 + 2 (or 1 + 3 in a single instance); loreal, 1; anal single. All show the pattern of large quadrangular blotches.

No. 285 contained the remains of a small terrestrial salamander, which is described elsewhere in this paper.

No. 283 has a median white line dividing the anterior spots, which tend to alternate.

Data on Thamnophis phenax phenax (Cope)

No.	*Sex*	*Locality*	*Ventrals*	*Caudals*	*Body blotches*	*Total length*	*Tail length*
283	♂	Xilitla	151	72	41	548	131
284	♀	Xilitla, Miramar 4,500 ft.	159	62	37	548	105.5
285	yg.	Xilitla	159	75	48	157	48
286	yg.	Xilitla	160	80	41	163	51
287	♂	.....	161	78	41	...	...

Thamnophis marciana (Baird and Girard)

Eutaenia marciana Baird and Girard, Catalogue of North American Reptiles, 1853, pp. 36-37. (Type locality, restricted to Red River, Arkansas. Originally included New Braunfels, San Pedro, and Indianola, Texas.)

Thamnophis marciana Ruthven, U. S. Nat. Mus. Bull., 61, 1908, pp. 849-852, pl. 93.

Smith and Taylor * have regarded a record of this species for San Luis Potosí ** as doubtful. The finding of three specimens in the

* U. S. Nat. Mus. Bull., no. 187, Oct. 5, 1945, p. 164.

** Garman, Bull. Essex Inst., vol. 19, 1887, pp. 7-8.

northeastern part of the state by Mr. Charles R. Shaw and Marcella Newman establishes the species beyond question as a resident of the lowlands in the eastern part of the state. Two were taken November 6, 1946, and one on March 19, 1947. The following data were recorded:

The following scale characters are invariable: scale formula, 21-21-17; supralabials, 8-8; infralabials, 10-10; loreal, 1; anal, 1; 5 scales touching first chinshield. The temporals are 1 + 2, 1 + 3, or 2 + 2.

The lateral light stripe is restricted to the third scale row. A vertebral light (orange) stripe one whole, and two half scale rows wide, is evident the length of the body.

Data on Thamnophis marciana (Baird and Girard)

No.	*Sex*	*Locality*	*Ventrals*	*Caudals*	*Preoculars*	*Postoculars*	*Total length*	*Tail length*
288	♂	Ebano	149	62	1-1	4-4	335	71
289	♀	Ebano	146	58	1-1	4-4	408	89
290	♂	Sabanito	151	69	1-1	3-4	460	110

Storeria dekayi texana Trapido

Storeria dekayi texana Trapido, Amer. Mid. Nat., vol. 31, no. 1, pp. 63-69, figs. 51-60. (Type locality, San Rafael, Jicaltepec, Veracruz, México, alt. circa 100 ft.)

Two specimens from the Xilitla region are referred to this recently described form. The species has been reported from the state on the basis of paratypic * specimens which I collected, 5 miles south of Valles.

Data on Storeria dekayi texana Trapido

No.	*Sex*	*Locality*	*Ventrals*	*Caudals*	*Supra-labials*	*Infra-labials*	*Total length*	*Tail length*
268	♀	Xilitla	141	47	7-7	7-7	350	64
269	♀	Xilitla	141	36+	7-7	7-6	322	50+

The scale formula is 17-17-17; postoculars, 2-2; preoculars, 1-1; temporals, 1 + 2, and 1 + 2, 1 + 3.

Seven of the subcaudals of no. 269 are entire, while the remainder are normally divided; the fifth and fourth labials are fused together. The adult markings are much obscured.

No. 269 contains 8 nearly full-time embryos, which average about 84 mm. in length. Paired spots on the dorsum are evident.

No. 268 contains several eggs, but in none did I discern embryos. This specimen was captured May 13; the other with the embryos was taken June 29.

It is significant that there are two subspecies of *Storeria dekayi* reported from San Luis Potosí. The two specimens of *Storeria*

* These are not specifically designated as paratypes but were dealt with in the type description.

dekayi texana mentioned in the type description "5 miles south of Valles, District Ciudad de Valles EHT-HMS 4662, 2664" were taken in the same pile of driftwood in which was found *Storeria dekayi temporalineata* mentioned in the type description of that form as "five miles south of Valles, EHT-HMS 4663." If these are distinct, one might question the wisdom of regarding them as subspecies. Sufficient material is not at hand to determine this point.

Tantilla rubra Cope

Tantilla rubra Cope, Journ. Acad. Nat. Sci. Philadelphia, ser. 2, vol. 8, 1876. (Type locality, "Tapanatepec" = Tapana, Oaxaca); Smith, Zoologica, vol. 27, 1942, p. 40.

One specimen from the Xilitla region (no. 305 ♂) has the head missing save for certain fragments of skin and one lower jaw.

The scale formula is 15-15-15. The mental is separated from the chinshields. There are 7-7 infralabials, the first four in contact with the first pair of chinshields. There are 157 ventrals, and 64 caudals. The total length (length of head estimated) 345 mm.; length of tail, 85 mm.

The general color is a pinkish brown, the edges of each scale somewhat darker than the center. Ventrals and caudals are pink. The outer half of outer scale row is cream, with a slight wash of pink, scarcely differentiated from the ventral coloration. The upper half of the outer scale row is distinctly darker than adjacent rows. On the tail the lower half of the outer scale row has a small triangular blackish spot on each scale.

A broad, black, nuchal collar is present, three to four scales in width. Preceding this is a cream collar two and one half scale rows wide. A black occipital collar crosses the parietals and reaches to the supralabial edges. A few black spots on infralabials. Other details of the head coloration are wanting.

Tantilla shawi sp. nov.

Type: Louisiana State University Museum no. 306. Collected at Xilitla (Miramar), Aug. 28, 1947, by Charles Shaw.

Diagnosis: A tantilla characterized by seven supralabials, six infralabials, the chinshields separated from the mental; ventrals, 169; subcaudals, 48; anal divided.

Tip of snout black, bordered by a cream band that is followed by a broad black area reaching to the back part of parietals; cream spot behind eye extending from frontal to labials; an occipital cream band one scale wide, followed by a broad nuchal black band four

scales wide. Anterior fourth of body banded with narrow cream and wider black bands.

Description of type: Rostral broader than high, visible above as a very narrow triangle, the summit curved rather than angular; internasals a little less than half area of prefrontals, which are very broad, in contact laterally with second labial; frontal hexagonal, obtusely angled in front, acute behind; distinctly longer than wide (1¼ times), its length greater than its distance from tip of snout, its width not quite twice that of supraoculars; parietals minutely longer than their distance from tip of snout; nasal divided, the anterior part about a half larger than the posterior, and separated from preocular by prefrontal; nostril between two nasals, the posterior widely separated from preocular; one preocular, two postoculars; a large anterior temporal followed by a posterior temporal that is somewhat smaller; supralabials, 7-7, in following order of size: 1, 3, 2, 5, 4, 6, 7, the third and fourth border the orbit; 6-6 infralabials, the first pair separating mental and chinshields; four labials touching the first chinshields, which are nearly three times area of second pair; latter pair in contact; diameter of eye twice in snout length, and one and one-fourth times in eye to nostril distance. Scale formula, 15-15-15; the scales smooth without trace of apical pits; ventrals, 169; caudals, 48; anal divided; total length, 369; tail, 73.5.

Color: Tip of snout blackish, bordered by a cream band that crosses snout, reaching mouth; beginning on the anterior part of the prefrontals and extending to near the posterior tip of parietals, a broad black band reaching on side of head to mouth; a cream spot, covering part of the fourth and fifth supralabials, extends up some distance behind the eye, reaching the frontal; an occipital cream band about one scale wide connects with cream color of chin and throat; this followed by a broad nuchal dark band about three and one half scales wide. The infralabials and mental with variable-sized areas of black, bordered partially by cream; the spot on the fourth infralabial reaches to chinshield; that on fifth small, leaving a large cream area.

General color of body black or bluish black, the edges of the scales faintly outlined in cream or white; scales of outer row with widest light edges; a series of small black dots on outer edge of ventrals (except first 18 or 20) and caudals; venter and subcaudal region light pink; chin and throat cream; anterior fourth of body traversed by narrow transverse cream lines, usually less than one scale wide, and which may be broken mesially and tending to alter-

nate with that from opposite side. There is a suggestion of a discontinuous median line on this part of body.

Relationship: The species differs from all other Mexican species in the character of the annulation of the anterior fourth of the body, and in the details of the head markings.

The Central American *Tantilla annulata* has this tendency to annulation carried still farther back, some of the semiannulations being present on the tail. That form, however, is one of the largest in the genus—a Costa Rican specimen examined having a total length of 502 mm., the tail being 108 mm. The character of the markings, yellow bars with black borders, is such that there is no possibility of confusing the species with *Tantilla shawi.*

The species is named for Mr. Charles Shaw, its discoverer.

Coniophanes imperialis imperialis (Kennicott)

Taeniophis imperialis Girard, The U. S. Naval Astronomical Expedition to the Southern Hemisphere during the years 1849-'50-'51-'52, Reptiles, Senate Doc., no. 121, 1855, p. 215. (Type locality, Matamoros, Tamaulipas, México.)

Coniophanes imperialis imperialis Cope, Ann. Rept. U. S. Nat. Mus., 1898 (1900), p. 1090; Bailey, Papers Michigan Acad. Sci. Arts Lett., vol. 24, pl. 2, 1938 (1939), pp. 34-35, pl. 1, fig. 1, map, fig. 5.

Two specimens (nos. 296, 297) were taken on the lowlands at Ebano in the extreme northeastern part of the state. These agree in the following characters: scale formula, 19-17-15; supralabials, 8-8; infralabials, 9-9; preoculars, 1-1; postoculars, 2-2; temporals, 1 + 2; loreal, 1; anal, 2.

The ventral scale count and measurement in mm. for 296 is 135; caudals 71; total length 398; tail 111; for 297, ventrals 132; caudals 74; total length 140, tail 44. Both are male.

From Bailey's diagnosis of this form, *loc. cit.*, these differ in having 17 scale rows about the middle of the body instead of 19. They agree, however, rather completely in the characteristic color pattern shown in Bailey's illustrations, *loc. cit.*

In 297, a recently hatched specimen, the markings are very sharply defined. The light line through the eye is white, edged with black, and extends along the canthal region and across the snout. The anterior end of the dorsolateral stripes are white, but soon develop posteriorly a scattering of brownish pigment. The lower edge of the white line is bordered by a black line, which is the upper edge of the broad lateral dark stripe that covers 4½ scale rows. The supralabials are bordered above by a black line, below which is a white line. Below this line the lower part of the labials are flecked with black pigment. The chin and infralabials are also flecked with

pigment, and there is a distinct spot on the fifth infralabial. There is a very indefinite pigmented area on the outer edges of the ventrals.

There is no apparent approach to *Coniophanes imperialis clavatus* or *proterops,* forms that occur to the south.

These specimens are the first records of the subspecies for the state.

Coniphanes fissidens proterops (Cope)

C[oniophanes] proterops Cope, Proc. Acad. Nat. Sci. Philadelphia, vol. 12, 1860, p. 249. (Type locality, vicinity of Jalapa, Veracruz.)

Coniophanes fissidens proterops Smith, Proc. U. S. Nat. Mus., vol. 91, 1941, pp. 107-109, map, fig. 33.

A single specimen of this species (no. 295) is in the collection from the Xilitla region. It is the first record of the form for San Luis Potosí.

The specimen shows the following characters: scale formula, 19-19-17; ventrals, 129; caudals, 30 + (tail broken); supralabials, 7, infralabials, 10; preocular, 1; postoculars, 2; temporals, 1 + 2; 5 labials touch first chinshields; length of body 300; tail partially missing.

The median dorsal "black" line consists only of the dark edges of the median dorsal scale row, and taken together the spots have the appearance of a chain.

Trimorphodon tau Cope

Trimorphodon tau Cope, Proc. Amer. Philos. Soc., vol. 11, 1869, pp. 151-152. (Type locality Quiotepec, Oaxaca); Taylor, Univ. Kansas Sci. Bull., vol. 26, 1939 (1940), pp. 474-477, fig. 8, pl. 51.

A single specimen of this species (no. 298), captured two and one-half miles south of Pendencia, San Luis Potosí, December 2, 1946, traces the known range from the southern edge of the plateau, a distance of some three hundred miles. Heretofore the species has been known from possibly half a dozen specimens, with localities in Michoacán, Guerrero, and Oaxaca.

This specimen has been compared with Oaxaca specimens and while a few differences exist it does not appear to merit nomenclatural designation. A larger series from this region might point to a separation.

The specimen is a female having a scale formula 23-21-15 (Oaxaca specimens have 23-20-16 and 22-21-14); ventrals, 218; caudals, 59; anal, 2; supralabials, 8-8; infralabials, 11-11; preoculars, 3-3; postoculars, 3-3; loreals, 3-2; temporals, 2 + 3 + 4, 2 + 2 + 4, somewhat irregularly placed; four infralabials touch chin-

shields; anterior chinshield double the size of posterior; fourth and fifth labials enter orbit; spots on body, 27; 12 or 13 on tail.

The markings of the head and general markings of the body approximate rather closely the pattern depicted by Taylor, fig. 8, *loc. cit.*, and pl. 51. However, the ground color of the specimen is a little darker. The edges of the ventrals have indistinct darker spots which are the ends of the dorsal blotches and small spots that alternate with them. There may be some peppering of pigment on the ventrals, scarcely visible to the naked eye. There are a few indefinite dark marks on the chin.

The following shows the similarity in scale counts between this specimen and two in the EHT-HMS collection (nos. 5506, 5507 from San Felipe, Oaxaca, near the city of Oaxaca). LSU no. 298 ♀ ventrals, 218; subcaudals, 59; total, 277. No. 5506, ♂, ventrals, 206; subcaudals, 70; total, 276. No. 5507, ♀, ventrals, 220; subcaudals, 57; total 277.

Leptodeira maculata (Hallowell)

Megalops maculatus Hallowell, Proc. Acad. Nat. Sci. Philadelphia, vol. 12, 1860 (1861), p. 468. (Type locality, "Tahiti," by error.)

Leptodeira maculata Taylor, Univ. Kansas Sci. Bull., vol. 25, 1938 (1939), pp. 337-342, figs. 6-7, pl. 31, fig. 1; pl. 32; pl. 33, figs. 1-3.

One specimen (no. 299) was taken near Sabanito, El Salto Junction, Naranja Region, San Luis Potosí. The ventrals are 169, the subcaudals 59. Other scale data are: preoculars, 2, postoculars, 3-2; upper labials, 8; lower labials, 10; 26 body spots, 8 caudal spots reaching laterally to the second scale row; scale formula, 23-25-17. The characteristic head marking consists of a white border on the frontal scale, connecting with a line formed by the white edges of the parietals that follows their common suture.

The specimen was taken in "palm jungle by a marsh."

Leptodeira annulata septentrionalis (Kennicott)

Dipsas septentrionalis Kennicott, in Baird, Report of the U. S. Mexican Boundary Survey, vol. 2, 1859, Reptiles, p. 16, pl. 8, fig. 1. (Type locality, Matamoros, Tamaulipas, México, and Brownsville, Texas, U. S. A.)

Leptodeira annulata septentrionalis Smith, Proc. Biol. Soc. Washington, vol. 54, 1941, p. 117.

Six specimens were taken, five from the Xilitla region and one from the extreme northeastern part of the state at Ebano.

The series shows complete uniformity in the following characters: scale formula, 21-23-17; supralabials, 8; infralabials, 10; preoculars, 3; postoculars, 2; scales touching first chinshields, 5.

Smith, *loc. cit.*, has recently described a new form, *Leptodeira*

annulata taylori, from Orizaba, Veracruz, characterized by 196-206 ventrals; 80 to 101 caudals; usually three preoculars, and spots not extending below the third scale row; from 36 to 47 dorsal spots on body.

In the series at hand the spots reach either the first scale row (3 specimens), the second row (one specimen), or the third row (one specimen). The northern *septentrionalis* ordinarily reduce the scale rows to 15 in front of the anus and the spots are usually less than 25—rarely above thirty.

Despite certain differences it seems that the affinities of these specimens are closer to *L. a. septentrionalis* than to *L. a. taylori,* and not impossibly they represent a population similar to that at Tuxpan which Smith, *loc. cit.,* regarded as representing intergrades.

The stomach of no. 300 contained the remains of an unidentified *Sceloporus.* No. 302 had 9 eggs in the oviducts.

Data on Leptodeira annulata septentrionalis (Kennicott)

No.	*Sex*	*Locality*	*Ventrals*	*Caudals*	*Body spots*	*Tail spots*	*Total length*	*Tail length*
300	♂	Ebano	195	83	30	15	386	87
301	yg.	Xilitla	193	94	28	18	420	106
302	♀	Xilitla	193	77	29	12	825	158
303	♀	Xilitla	205	75	29	14	820	156
304	♂	Xilitla	206	66	32	14	818	146

Micrurus fitzingeri microgalbineus Brown and Smith

Micrurus fitzingeri microgalbineus Brown and Smith, Proc. Biol. Soc. Washington, vol. 55, 1942, pp. 63-67. (Type locality, 7 km. south of Antiguo Morelos, Tamaulipas, México.)

The collection contains three specimens of this form which has been known previously from only two specimens, one from the type locality and one from Tamuzunchale, San Luis Potosí.

The following data add considerably to our knowledge of the variation in subspecific characters:

Scale formula: 15-15-15; supralabials and infralabials, 8. Preoculars, 1; postoculars, 2; four scales touch the chinshields. Temporals $1 + 1 + 2$ in two specimens, $1 + 1 + 1$ in the other.

The color pattern is formed by a series of alternating black and red bands, separated by very narrow white bands. Usually the white part consists of separate white spots covering about one half of a scale and not or barely contiguous with the next white spot. As a result of this the red bands appear to have a zigzag edge, while the black bands present an edge that is nearly straight.

The black bands usually cover from three to four scale rows; occasional bands cover only 2½ scale rows. The intervening red bands vary from 6 to 7 scale rows in length. More than half of the

scales of all the rows except the outer have a black spot. The black spots vary much in size, being largest about the middle of the body. A few black spots usually smaller than a dorsal scale are scattered sparsely and irregularly on the ventrals.

The white band crossing the parietal region is half or a little less than half the length of the parietal. It passes somewhat forward involving the entire sixth labial and parts of the fifth and seventh labials. The rest of the upper labials are intensely black. Three white areas present on the chin, the two outer covering parts of the fourth and fifth lower labials, the median, the anterior part of the second pair of chinshields. In one specimen the spots are practically contiguous, thus forming a band entirely around the head.

The female specimen no. 309 has five black and four white bands on the tail, the black being 6 to 6½ scale lengths wide, the white 2 scale rows wide. The males have 6 or 7 black bands on the tail of about the same length as those in the females. The white bands in no. 307 are partially red below and above, and some of the scales bear black spots. No. 308 shows only a faint shade of red on one or two of the white scales.

A specimen (no. 310) of *Micrurus* is referred to this form with considerable reluctance. The white band across the parietals is wider (nearly ⅔ the width of the parietals) involving all the fifth and sixth supralabials and part of the seventh, then passing across the chin involving 5th and 6th infralabials, and most of both pairs of chinshields.

The black blotches on the body are a little wider and occupy four ventrals below, more often than three. The intervening red areas have practically every scale bearing a black fleck, and on the ventrals there is usually a pair of heavy black spots much larger than those on the dorsal part of the red blotches. The neck and body has 20 black blotches, the tail four. There are four white bands on the tail.

The scale data agree with those given for the Xilitla specimens save that ventrals are 222, the caudals 32. The black bands have zigzag rather than straight edges. The snake is 703 mm. in length; the tail 70.

This specimen comes from 17 km. west of Ebano in the northeastern lowlands of the state. It will be noted that the character of the head band suggests the condition that obtains in the typical subspecies *M. f. fitzingeri*. That form is known, however, only from the high plateau.

Data on Micrurus fitzingeri microgalbineus Brown and Smith

No.	*Sex*	*Locality*	*Ventrals*	*Caudals*	*Body bands*	*Tail bands*	*Total length*	*Tail length*
307	♂	Xilitla	204	44	24	7	732	102
308	♂	Xilitla	208	42	27	6	735	93
309	♀	Xilitla	220	38	25	5	625	65

Bothrops nummifer (Rüppell)

Atropos nummifer Rüppell, Verz. Mus. Senck., Amph., 1845, p. 21. (Type locality México.)

Bothrops nummifer Jan, Elenco sistematico degli Ofidi, 1863, p. 126; Smith, Proc. U. S. Nat. Mus., vol. 93, 1943, pp. 398-401.

There are two specimens of *Bothrops,* nos. 318, 319, taken at Xilitla June 19, 1947, that are puzzling, inasmuch as they occur at the extreme northern part of the range of *Bothrops nummifer* (as interpreted by Smith, *loc. cit.,* yet they agree in having certain general characteristics of *B. mexicanus* which tend to separate that form from *B. nummifer.*

In ventral and subcaudal counts the specimens approach the condition in the northern *B. nummifer.* In the scale rows about the body, one approaches *B. nummifer,* one the southern *B. mexicanus.* In the character of the rostral (in contact with the nasal, first labial and two other scales laterally, and with a small median postrostral) they should be referred to *mexicanus.* In dorsal pattern they are more or less intermediate, one approaching the character of *mexicanus,* the other, as regards the fusing of the dorsal blotches into a zigzag or undulating band, is quite like *nummifer.*

However, I feel that a larger series of specimens should be examined before it is decided whether or not this is an "intergrading" population.

No. 318 contained a "⅓ grown black rat."

Data on Bothrops nummifer (Rüppell)

No.	*Sex*	*Scale formula*	*Ventrals*	*Caudals*	*Supra-labials*	*Infra-labials*	*Total length*	*Tail length*
318	♂	25-25-20	134	33	10-9	12-11	661	75
319	♂	23-23-19	131½	33	9-9	11-10	520	62

Bothrops atrox asper (Garman)

Bothrops atrox Duméril, Bibron and Duméril, Erpétologie générale, vol. 7, pl. 2, 1854, pp. 1507-1509. (Type locality, Obispo, Panamá.)

Bothrops atrox asper Smith and Taylor, Bull. U. S. Nat. Mus., no. 187, 1945, pp. 180-181.

Seven specimens were taken, three at El Salto, three at Xilitla. The subcaudals in all are in a double row. One or two scale rows intervene between the long subocular and the labials. The number of loreals varies between three and four. There are two preoculars, two postoculars, and usually 10 or 11 scales between the supra-

oculars. No. 311 has the first pair of infralabials broken, forming an extra pair of "chinshields."

Data on Bothrops atrox asper (Garman)

No.	Locality	Sex	Scale formula	Ventrals	Caudals	Supra-labials	Infra-labials	Total length	Tail length
311	El Salto	♀	27-28-19	205	62	7-8	11-10	789	109
312	Xilitla	..	27-25-20	203	63	7-7	10-11	1282	176
313	Xilitla	♂	25-25-20	205	70	7-7	11-11	1035	150
314	Xilitla	..	25-29-18	203	63	7-8	10-11	1025	127
315	El Salto	..	28-29-21	209	63	7-8	10-11	890	112
316	El Salto	♂	28-25-21	210	67	7-7	10-10	854	120
317	.....	♂	28-25-21	204	68	7-7	10-10	1410	195

Crotalus triseriatus triseriatus Wagler

Urosophus triseriatus Wagler, Natürliches System der Amphibien, 1830, p. 176. (Type locality México.)

Crotalus triseriatus triseriatus Klauber in Githens and George, Bull. Antiv. Inst. America, vol. 5, 1931, p. 33 (part); Gloyd, Chicago Acad. Sci. Spec. Publ., no. 4, 1940, pp. 84-91, map 6, pl. 6, fig. 1, 2; pl. 31, fig. 4 (reported from Alvarez, San Luis Potosí).

Ten specimens of *Crotalus* in the collection are referred to this species. Of the ten specimens, eight are from the Xilitla region, at an elevation from about 3,800 feet to 4,400 feet; two are from Cerro Conejo at a somewhat higher elevation. For the most part, the specimens are uniform in color and markings, and agree in having a series of from 36 to 44 quadrangular blotches on the body, and from 5 to 7 on the tail. However, one of the series (no. 321) differs markedly in having the head and body an almost uniform, slaty black. On the posterior sixth of the back, a few very dim lighter narrow marks can be discerned with difficulty when the specimen is held in the proper light.

The ventrals are less intensely dark than the other specimens and have lighter edges. The tail has some dim orange coloration ventrally and laterally. The keels on the scales are seemingly less strongly elevated than those on the remainder of the series. The scale counts of the specimen, however, fall within the known variation of the species. No melanistic specimens have heretofore been reported, although certain other aberrant specimens have been cited by Gloyd, *loc. cit.* This specimen contained a partially digested salamander in its stomach and very numerous tapeworms.

The ventral scale series, whether male or female, averages 154. This is the average given by Gloyd for the San Luis Potosí specimens.

One specimen (no. 325) presents a curious anomaly, in having the lower preocular completely absent. As a consequence, the orbit and the sensory pit are confluent. The pit itself is divided into two compartments by a heavy membrane. This condition obtains on both sides of the head.